# AMULICAN PROMATICS AND AROMATICS

COSMETICS TOILETRIES SOAPS

PHARMACEUTICALS
FOODS
FLAVORING
& ADDITIVES

ESSENTIAL OILS

**APRIL 1956** 

THE MAGAZINE OF TASTE AND SCENT



olin Derivatives... Page 35 • Permanent Wave Neutralization... Page 4

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APRIL 1956

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April, 1956



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April, 1956 5

### aerosol



# pioneers

The trend towards the use of aerosols for packaging personal products continues apace with the cooperation of essential oil companies which have rendered yeoman service in ironing out difficulties encountered in adapting delicate fragrances to cosmetics packed in these containers. The list of cosmetic manufacturers and perfumers who have adopted aerosols is growing fast and it is impossible to give a complete list of the present users. However a list of companies that have been offering one or more products in aerosols for well over a year follows:

The pioneers in offering perfumes and colognes in aerosol containers include Harriet Hubbard Ayer, Bour-

\*

#### ORIGIN

Research by L. D. Goodhue and W. N. Sullivan of the United States Department of Agriculture is the basis of the aerosol invention which dispenses a product from a container by the power of a compressed liquefied gas. U. S. Patent No. 2,321,023 was issued on July 8, 1943 and assigned to the Secretary of Agriculture. Most of the development of the principle was done in the early 1940's, with government laboratories and many industrial groups participating. The pioneer work resulted in the well known insecticide of World War II, of which more than 50,000,000 containers were produced.

Abstracted from "Package for Profit," publication prepared by E. I. du Pont de Nemours & Co. (Inc.).

\*

jois Inc., Coty Products Inc., D'Estree Inc., Count Dorelis Inc., Lee Ltd., Dorothy Gray Ltd., J. Warren Kane (Carven), Lentheric Inc., Parfums Corday Inc., Rexall Drug Co., Helena Rubinstein, Schiaparelli Parfums Inc., Allen B. Wrisley Co., Zonite Products Corp. and Elizabeth Arden.

Shaving creams likewise have been offered for well

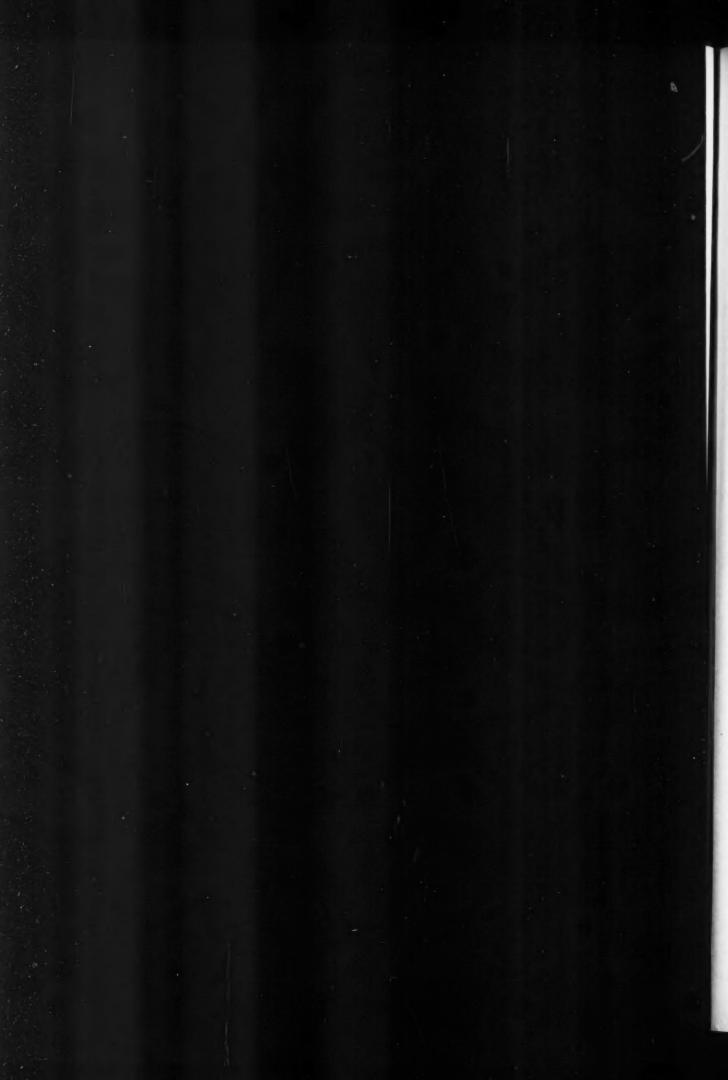
over a year by American Safety Razor Co., Barbasol Co., Boyle Midway Inc., Burma Vita Co., Campbell Products Co., Carter Products Inc., Centaur-Caldwell Div. of General Drug Inc., Charbert Inc., Claire Manufacturing Co., Colgate-Palmolive Co., Consolidated Royal Chemical Co., Dyna-Shave Inc., Gillette Safety Razor Co., Huntington Laboratories, Andrew Jergens Co., Lalon Corp., Lentheric Inc. Alfred D. McKelvy Co., Mennen Co., John Hudson Moore Div. Warner-Lambert Pharmacal Co., Noxema Chemical Co., L. Perrigo Co., Rexall Drug Co., Shulton Inc., E. R. Squibb & Sons, Stanley Home Products Inc., Valentine Laboratories, Inc., Walgreen Co., Weeks & Leo Co. K. B. Williams Co. and Yardley of London, Inc.

Manufacturers of hair net sprays were among the first to capitalize on the unique features of the aerosol principle for packaging their products. The pioneers in this group were A. M. R. Chemical Co., Charles Antell, Cara Nome Distributors, Caryl Richards Inc., Consolidated Royal Chemical Co., Dermetics Inc., Eaton Cosmetics, Lee Ltd., General Products Co., Gibbs & Co., Glenby Co., Helene Curtis Industries Inc., Warner-Hudnut, La Maur Products Inc., Leonid de Lescinskis, Inc., Nestle LeMur Inc., Lustray Laboratories, Raymond Laboratories Inc. Revlon Products Corp., Reiner Co., Valentine Laboratories, Diane Winston Inc., Balm Barr Co., E. P. P. Inc., and Dr. Ellis Sales Co.

In the same way makers of sun tan sprays found in the aerosol the answer to the problem of quick and even application of their products. The pioneers in this group were: Bekol Chemicals Inc., Desert Tan Co., Dorothy Gray Inc., Judson Dunaway Corp., Douglas Laboratories, Larson Laboratories, Norwich Pharmacal Co., Helena Rubinstein, Spray Tan Inc., Rexall Drug Co., E. R. Squibb & Sons, Vijon Co. and J. B. Williams Co.

Other products of a personal nature which are now available in aerosols are athlete's foot remedies, personal and space deodorants, hand cleansers, brilliantines and other hair dressings, hair tint sprays, hand lotions, manicure preparations, and shampoos.







#### MINUTE NEWS . .

TGA Meeting to be Post Graduate Course for Top Executives

In effect the May 15, 16 and 17 meeting of the Toilet Goods Assn. will be a post graduate course for top executives and their associates in the cosmetic industry according to E. Robert Schwartz, program chairman. An entire morning session will be devoted to revealing new ideas in packaging, packaging materials and new production techniques. Under the direction of Edward Love, production manager for the Bristol-Myers Co. secrets of packaging and production now used by successful concerns will be revealed. The session on sales and management will be directed by Albert E. Ritchie of the Wildroot Co., a national officer of the National Sales Executives Assn. Does automation fit the small business? What are the profitable markets still untouched by the big companies? Do point of purchase materials fit modern merchandising trends? The foregoing are a few of the areas to be covered. The advertising session by Edward Breck, president of John M. Breck Inc., will also change thinking. Could you break into television on a shoe string? Some have done it and grown big. Maybe you should be using radio? Do you know why magazines and newspapers are more important than ever before? Such questions will be answered. 1956 will be a record year of prosperity for those who bestir themselves says Mr. Schwartz. The whole program of the meeting has been planned to give direction for the future and new ideas with which to work.

Commissioner George P. Larrick to be S. C. C. Honorary Member

Commissioner George P. Larrick of the United States Food and Drug Administration will be the eighth distinguished person to be elected to honorary membership in the Society of Cosmetic Chemists. The scroll conferring honorary membership will be presented by President George G. Kolar at the luncheon of the Society May 18.

Glamour Ideal Set by Grace Kelly and Queen Elizabeth II

Lilly Dache, noted beauty expert who has just published a book on Glamour, rates Queen Elizabeth II of England and Grace Kelly, bride of His Serene Highness Prince Rainier Grimaldi III of Monaco as the perfect symbols of glamour for this decade. Both inspired a new formula for glamour or "the art of attraction." Predecessors for this century were: Maxine Elliott and Anna Held (1900's); Theda Bara and Mary Pickford (1910's); Irene Castle, Gloria Swanson and Clara Bow (1920's); Joan Crawford and Greta Garbo (1930's); and Marlene Dietrich and the Duchess of Windsor (1940's). The Grace Kelly-Queen Elizabeth type of glamour, Miss Dache points out, is composed of these elements: 1. Breeding, a new requirement for this decade. 2. Reserved sex appeal. 3. Perfect grooming (more glamorous than natural beauty today). 4. Quiet, good taste in clothes. 5. Slenderness (important since 1920). 6. Femininity combined with independence (the clinging vine is no longer glamorous).

Displaying Product After Advertising Campaign Keeps Up Sales

Following a test of its "24" lipstick in six cities, Coty Inc. found that sales stay up if the retailers keep on displaying the product. Without the display, sales decline.

My Favorite Girl Friday Honored by Industry Salesmen Secretaries and receptionists in the chemical trades were honored by the Salesmen's Assn. of the American Chemical Industry at a "My Girl Friday" luncheon at the Waldorf Astoria Hotel, March 15.

#### F. T. C. Charges Against Revion to be Heard in New York May 7

A hearing on the charges of the Federal Trade Commission against Revlon Products Corp. for unfair discrimination among customers in not furnishing promotion allowances and services on proportionately equal terms in violation of the Robinson-Patman Act will be held in New York May 7. The Commission charges that only 26 out of 118 Revlon customers in the Washington, D. C. area received services or allowances. Furthermore it is charged that some allowances were as high as 22.5% of sales and others as low as 3.3%. It is also charged that customers advertising allowances defrayed by Revlon ranged from 69.4% to 100%. Similar practices it is charged were followed in Baltimore, Chicago, Cleveland and San Francisco. Revlon contends that there is no sound basis for the charges.

#### Swivel Stick Deodorant Launched by Northam Warren

Instant Odorono, a swivel stick deodorant, has been launched by the Northam Warren Co. following months of research and tests. Zirconium is employed to sponge up perspiration, hexachlorophene to kill odor causing bacteria, and allantoin to heal razor nicks and other irritations.

#### Deodorant Stick Dropped by Norwich Pharmacal Co.

When present stocks are exhausted the Norwich Pharmacal Co. announces that it will discontinue its  $1\frac{1}{2}$  qz. Amolin deodorant stick. The fair trade price on it of 70 cents has been withdrawn.

#### New Drug Division Launched by Revion Products Corp.

A new drug division has been launched by Revlon Products Corp. to manufacture proprietary drugs it is developing. Alfred Roberts, formerly of Block Drug Co. has been appointed vice president and general manager of the new division.

#### Talcs in Small Plastic Squeeze Bottles

Talcs in plastic squeeze bottles small enough to be easily packed in handbags, etc. are offered by Schiaparelli at \$2 each. Shocking odor is used for women and Snuff odor for men.

#### A & P Stores Launch Own Private Label Tooth Paste in Florida

Denti Kiss, its own private label tooth paste, has been put on sale by Atlantic & Pacific Tea Co. supermarkets in Florida. While this is contrary to the policy of the national company against private label dentifrices, the company's stores operate autonomously in a number of ways, the company states.

#### Children Get Tinkerbell Toiletries at Movies Across the Nation

Tinkerbell Toiletries in conjunction with RKO theatres held children's matinees in theatres across the country when Walt Disney's "Song of the South" was shown between March 15 and April 7. Each theatre showing the picture was supplied with 1000 Tinkerbell toilet water samplers which were distributed to the first thousand little girls arriving at the theatre. Other Tinkerbell toiletries were distributed as prizes.

#### Three New Businesses For Every 100 Babies

Three new businesses are springing up for every 100 babies being born according to Dun & Bradstreet. Baby products are booming as a result of this. While the rising birth rate may mean more competition, it also means, according to the NWDA News, more customers.

#### When People Worry They Gnash Their Teeth

When people worry or when there is tension or vitamin deficiency, they unconsciously grind and gnash their teeth, according to a report given by Dr. T. E. J. Shanahan at the Greater New York Dental Society's annual meeting. Technically gnashing the teeth is known as bruxism, which loosens the teeth and may lead to dental infection.





RAGRANCE TOO!

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It must first be designed as a thing of beauty in itself . . .

It must be designed to diffuse properly, to last effectively and remain unchanged . . .

It must be designed to appeal to its intended clientele...

It must be designed, cost-wise, to suit marketing requirements.

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# Editorials ...

#### The Coming Cosmetic Conventions . . .

Quite aside from the benefits of membership in an alert trade association which are universally conceded, can any progressive concern or qualified individual afford to miss attending the annual meeting of the Toilet Goods Assn., May 15-17, and the semi-annual meeting of the Society of Cosmetic Chemists, May 18? Both will be held in New York.

Sales and management will be emphasized at the Toilet Goods Assn. meeting. New ideas in packaging, in packaging materials and techniques are promised for an entire session. Top men in sales management will discuss automation what profitable markets are still untouched by the big companies, and similar subjects will be considered at another session. Advertising, which is now about the biggest part of sales expense, will be considered from various angles especially helpful to the smaller companies, at another session. The sessions of the Scientific Section as usual promises to be informative and timely.

At the meeting of the Society of Cosmetic Chemists Hon. George P. Larrick of the U. S. Food and Drug Administration will be awarded honorary membership and Dr. Walter B. Shelley, an outstanding dermatologist, will receive the Special Award of \$1000 to an author whose papers offer the greatest potential advance in cosmetic science. Seven technical papers on cosmetic science will be given at the sessions.

While in some instances the cost may be considerable to send high calibre executives to conventions the expense is warranted. Some companies manage to obtain maximum benefits by planning in advance. For example, the papers to be presented are examined, and a certain scientist in the organization is assigned to be present when a paper of pertinent interest to him in his work is read. Sales managers are similarly advised to attend sessions where new promotion ideas and current sales problems are discussed. Most companies make sure that at least one top official is present to get vital, first hand information on new concepts in management.

In addition to obtaining fruitful ideas at the business and technical sessions, conventions offer the opportunity to meet men who may be unavailable otherwise. That makes it possible to discuss matters of strong current interest with highly experienced men whose attention is not diverted. Attendance at a convention is a sound investment.

#### Food Additive Control Legislation . . .

It is unlikely that a law controlling additives in foods will be enacted this year according to the most reliable advices from Washington. Up to now the deadlock over the differences held by industry and by the government seem impossible of being compromised. However the door is open and any suggestions or comments on the proposed food additives bill may be sent to the subcommittee of which Rep. Percy Priest is chairman. The National Independent Meat Packers Assn. has already offered these suggestions:

 In order to give maximum protection to the public every new additive must be adequately pre-tested before commercial use.

2. Advance notice of new uses shall be given to the Food and Drug Administration and, as to meat products, also to the Meat Inspection Branch.

3. A simple change should be made in the definition of "poisonous or deleterious substance" as applied to additives. Some materials are harmful when used in large quantities but quite harmless in minute quantities. The public will be adequately protected if the definition is modified so as to condemn such additives only when used in quantities or under conditions that are potentially harmful to the health of consumers.

#### Help for Stricken Aromatic Plant Growers . . .

The extent of the devasting damage done by the severe cold spell of the past Winter to the aromatic plant and flower crops particularly in Grasse, France but also in northern Italy and northern Africa, is beginning to be appraised.

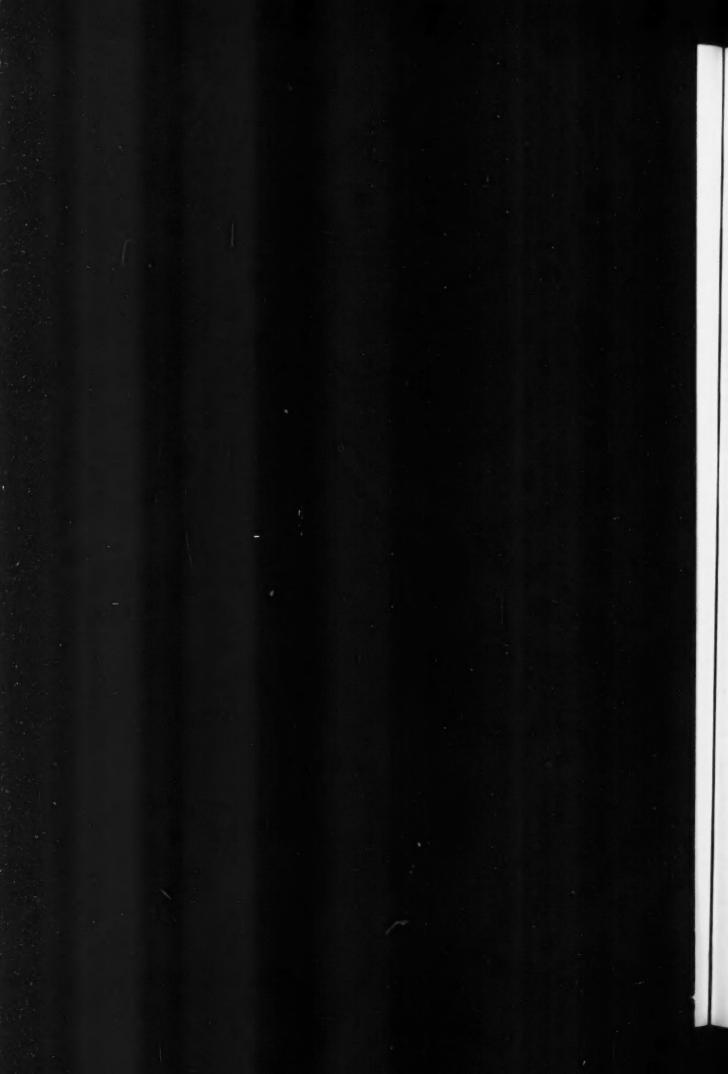
At a meeting of the Inter-Professional Group of Flower and Plant Growers of Grasse, Inspector General M. Veyzin representing the Ministry of Agriculture of France stated that the frosts were seven times as severe as those of 1929 and 1940. It was estimated that 220,000 of the 260,000 orange trees were killed, and the loss was computed at \$4,000,000. About 2,000 orange gatherers are affected. As a result it is expected that not more than 44,000 lbs. of neroli will be produced this year. Practically no reserve is on hand. Severe damage was also done to the Italian groves. Producers of neroli and orange absolute will endeavor to control prices to discourage the use of aromatic chemical replacements. Current quotations for neroli are \$400 or more per propund

As to mimosa, only the flowers brought in before the frosts can be processed and no more fresh flowers can be expected as the trees have been almost completely destroyed. Jasmin, rose and lavender plants have been affected but probably not as severely as first reported. As yet the full extent of the damage cannot be determined. Very little geranium from Grasse will be forthcoming. Geranium crops in Algeria, the Reunion Islands and the Congo are reported to be sparse. It is said that damage to the citrus trees in Italy and Sicily will affect the bergamot and lemon crops.

Immediate assistance is likely to be given to Grasse growers who wish to maintain or reconstruct their plantations under a plan offered by the deputy mayor of Nice. He pointed out that it was urgently necessary to grant loans with the participation of the Ministry of Agriculture. The G. I. P. A. may supply plants free to the producers. On account of the difficulties of producers in paying back loans, an effort is being made to obtain subsidies from the government; and if so a national loan on behalf of the victims of the frosts may be made. In that case funds will be held in reserve for rose, jasmin, etc., growers who have suffered considerably.

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e d n e f l



#### DESIDERATA

Maison G. deNavarre, F.A.I.C.



#### **Cosmetic Testing**

The Society of Cosmetic Chemists has organized a committee under the chairmanship of Dr. Donald Powers of Warner-Hudnut to correlate and make a study of test methods used in determining the effectiveness and safety of cosmetic preparations. A committee has been organized and it is already starting its job.

This is a big job and requires more than just the work of the members of the committee; accordingly, Dr. Powers has asked any-

one who uses any kind of test methods for determining the effectiveness of a product to communicate with him or his committee to try to adapt the method for recommen-

dation for other members' use.

It is hoped that after a study of this sort has been under way for a while that the committee will be able to establish a certain standard method for determining the product effectiveness and safety which will be adopted by the Society and carry its name.

#### **New Emulsifiers**

It just seems like we have moved so quickly in the field of emulsification that we went past one group of valuable products. These are the higher alcohols reacted with ethylene oxide (E.T.O.). Originally introduced in Germany before the war as Emulphors, there are numerous types now. The British Pharmaceutical Codex recognizes the products as Cetomacrogols when made from a cetyl-stearyl alcohol blend.

The Lanette waxes never excited much enthusiasm in the U. S., and it is sensed that while they enjoy a certain sale abroad, they are not exactly world beaters.

It is true that a mixture of, say, cetyl alcohol, sodium lauryl sulfate and water makes a scientifically interesting emulsion system as proved by Cockbain and Schulmann and others, but the fact remains that the use of the lauryl sulfate introduces an allergen to which just too many people are sensitive.

So, the higher alcohol E.T.O. condensates overcome this property yet retain all the advantages of the higher alcohols and the emulsion system so highly desired. The resulting emulsions take a lot of buffeting from various materials often considered hard to emulsify. Electrolytes are readily included in such formulations. Tests made in my laboratory indicate that people unable to use emulsions made with cetyl alcohol-sodium lauryl sulfate combinations can nicely tolerate the higher alcohol E.T.O. condensates.

Maybe we ought to go back a bit and re-evaluate these materials more exactly in the light of present day needs. There are a bunch of them available from different sources. As for reading, there is a darn good article by Hadgraft in the J. Pharm. & Pharmacol., 6, 816 (1954), covering a rather wide field of emulsions liquid and solid.

#### New Bases

The use of hexadienol together with hydrogenated cottonseed oil has shown promise in formulating suppositories, a stick or molded type of product. It takes little imagination to conceive another use for such a base.

Another interesting development is the colloidal dispersion of a particular polyethylene resin in mineral oil. Such a product is reputed to be less sticky and greasy at the same time less subject to change due to temperature variation.

Both items are worth further cosmetic investigation.

#### A.Ph.A. Scientific Papers

As this is read, the American Pharmaceutical Association Convention in Detroit will have ended. A number of papers of cosmetic interest will have been presented. Among them, A Study of Insoluble Solids as Emulsifiers; Interference of Nonionic Emulsifiers with Preservatives; A Study of the Effects of Certain Surfactants on the Surface Tension of Some Suspending Agents; The Preservation of Aque-



# ALPHA METHYL CINNAMIC ALDEHYD

Typical Specifications:

PHYSICAL APPEARANCE:	Light yellow liquid.
ODOR TYPE:	Cinnamon, Cassia.
SOLUBILITY:	10 parts soluble in 12 parts of 80% Ethyl Alcohol.
STABILITY:	Stable in presence of alkalies—of excellent lasting quality.
REFRACTIVE INDEX n 20 :	1.6040
SPECIFIC GRAVITY 20 :	1.036
QUALITY:	Carefully produced to rigid specifications and checked in our modern control laboratories.
SUGGESTED USES:	A notable and successful raw material for the production of OIL CASSIA SYNTHETIC.

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Resinoides

**Essential Oils** 

Natural Absolutes

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Aromatics Division

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ous Preparations Containing Nonionic Surfactants; Influence of Gum Tragacanth on the Bactericidal Activity of Preservatives; A Study of the Formulation, Physical Properties and Compatibility of a Proposed Lotion Vehicle; The Effect of Sodium Sodium N-Lauroyl Sarcosinate and a Sodium Dehydroacetate on the Enzymes of the Gastro-Intestinal Tract.

From this one can see that cosmetics have considerable ramification in pharmacy (and vice versa). In addition of this, there will have been given a series of papers on what is called "Practical Pharmacy," not to mention dozens of papers on other phases of the science.

#### Notes

On March 24, 1856, Wurtz made the first ethylene glycol, long predicted as a missing link between glycerol and ethyl alcohol, according to the Journal of Chemical Education for March 1956. . . . Now Mandel and Lunin writing in the Journal of the American Dental Association find penicillin tooth paste ineffective as an anticaries measure. . . I find it difficult to get enthused about antibiotics and hydrocortisone in cosmetics, in spite of the fine presentation made by Hetzel before the New York Chapter of the Society of Cosmetic Chemists-If hydrocortisone is absorbed, as some contend, then the complexity of side reactions is not for me-yet! And I am a firm believer in cosmetics with therapeutic properties. . . . U.S. Patent 2,722,-519 has been granted for a blue, "radiation" sensitive glass-the blue glass fades in color when exposed to "radiation," gradually returning to the original blue after "irradiation." . . . Well, after all these years, one company, making a big noise on television about its new liquid make-up, has discovered SORBITOL and has blended it into lanolin-Soooo! . . . The shortage of scientists continues to be discussed and there is much both pro and con on the subject. Never to be forgotten is the subject of pay. Too often there is too little. Too often men with 25 years experience find it hard to get a job-if there is a shortage how can we afford the luxury of kicking around men with all this experience? Sure there are pension problems, but if a real shortage exists, pensions can be worked out, too. So, the scads of letters to editors in chemical trade and scientific journals argue.

#### **VERICREST**

#### **Basic Protein Derivative And Protective Colloid**

a base material of unusual protective and beneficial properties for pretreating and preconditioning hair.

Vericrest makes it possible to produce and package, simply and economically, a

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(Under Your Own Label)

to sell to Beauty Parlors for use in treating hair prior to cold permanent waving, machine waving, bleaching, dyeing, etc. Easy to produce by simple admixture of Vericrest with tap water and perfume, etc. Standard Bottle packaging only required.

#### **VERICREST**

#### IN AN INSTANT COLD WAVE NEUTRALIZER-

By using Vericrest in our recommended sodium bromate formulation, the protective properties function to preserve the body, lustre and elasticity of the hair.

Complete data, literature, sample and tested formulae are available without cost.

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## New Designs

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ROM 9077/1 az. ROM 9077/1/2 DZ. ROM 9077/1/4 02. Satin matted ground-in stoppers.



NN 9072 /2 oz. NN 9072/1 oz. NN 9072/1/2 oz. NN 9072/1/4 oz. Cut ground-in stoppers.



NN 9073/2 ex NN 9073/1 ex. NN 9073/1/2 oz. NN 9073/1/4 oz. Cut ground-in stoppers.

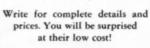
MR. PERFUMER - presented are new styles in CRYSTAL PERFUME BOTTLES designed in Paris and made in France to complement and aid in selling your product.



DAR 9074/9 0Z. DAR 9074/31/2 02 DAR 9074/2 02. DAR 9074/1 02. DAR 9074/1/2 02. Satin matted ground-in stoppers.

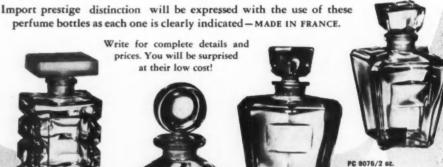


PC 9075/2 ez. PC 9075/1 ez. PC 9075/1/2 ez. Satin matted ground in stoppers.





ROM 9078/1 ez. ROM 9078/1/2 0Z.



PC 9076/1 oz. PC 9076/1/2 0Z. PC 9076/1/4 0z.

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THE FRENCH GLASS CO., INC. NEW YORK 20, N.V.

American affiliate of UNIVER-FRANCE comprising more than 50 crystal and glass factories who employ 20,000 workers.

# UESTIONS &

#### NSWERS

#### 1187: PARA-TYPE HAIR DYES

Q. We would appreciate receiving any pertinent literature references that you have available concerning the use as well as the toxicity of para-phenylene diamine type hair dyes. Aside from the book by H. Stanley Redgove published in 1939 and called "Hair-Dyes and Hair-Dyeing," we have been unable to find a good dissertation on the subject. D.H., N. Y.

A. There is one article on the toxicity of "para" type dyes in The Journal of the Society of Cosmetic Chemists, Volume V, No. 2, entitled, "Toxic and Allergic Complications of Hair Dyes," by Samuel M. Peck. Two letters to the editor were also published on this subject, one appearing in Volume V, No. 4 and the other in Volume VI, No. 3.

#### 1188: MOLD INHIBITOR

Q. In the October, 1955, "Desiderata" there is a reference as follows: "A new mold inhibitor, dimethyl dichloro-succinate is now being tested in food wrappers." We would appreciate receiving additional information on this reference. K.M.M., Canada.

A. The new mold inhibitor is supplied by the Kraft Chemical Co.

#### 1189: CREAM SACHET FORMULA

Q. What is the formula for cream sachet? W.P.M., Ala.

A. A cream sachet must be developed specifically for a given fragrance. So, it is impossible to give a fixed formula. However, the following is a starter. By reducing the amount of G-7596P, you can get a whiter looking product and by increasing the sodium carboxymethylcellulose, you can get a thicker consistency.

(A) Perfume oil 5%; Atlas G-7596P (Atlas Powder Co.) 25%. (B) Sodium carboxymethylcellulose 1%; Preservative q.s.; Water 69%. Preparation: Disperse sodium carboxymethylcellulose in water. Mix perfume and G-7596P. Then add (B) to (A) slowly with agitation.

#### 1190: FLAKINESS IN HAIR DRESSING

Q. I have been using powdered gum tragacanth U.S.P. in a hair trainer and greaseless hair dressing but cannot seem to eliminate the flakiness. Both articles are nonalcoholic. Would you be able to suggest a solution for the elimination of the flakiness. B.D.A., Miss.

A. As long as you use a gum of any kind in a hair trainer or dressing, you will get some flaking. The only way to eliminate it is to use a plasticizer, such as glycerine, propylene glycol, polyglycol or sorbitol syrup. Methocel may be used but it too will flake as will carboxymethyl cellulose. The latter is more like tragacanth. Try from 1 to 5 per cent of plasticizer, depending on the amount of gum present.

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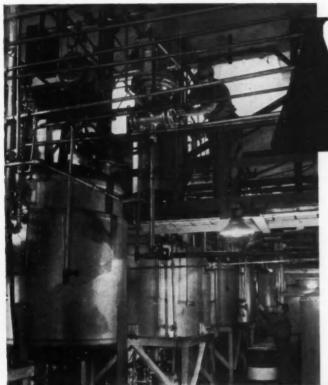
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Stainless steel high vacuum distillation equipment used in the purification of acetylated lanolin derivatives.

Lester I. Conrad and Kalmen Motiuk®

# LUNDUM



Lester I. Conrad (left) and Dr. Kalmen Motiuk in the research laboratory of American Cholesterol Products, Inc.

#### Properties and chemistry discussed . . . Uses in cosmetics indicated . . .

SEVERAL RECENT publications (1-4) have shed light on the nature of lanolin. This has given active workers in the field an opportunity to synthesize new derivatives based upon sound information and revised concepts of composition.

Derivatives of lanolin have been produced both in the United States and abroad for many years. A review of the published literature<sup>(5, 0)</sup> reveals that the chemical reactions employed in manufacturing these products involve chiefly unsaturated bonds and ester linkages.

#### Lanolin Esters

Lanolin is essentially a mixture of esters formed from

many types of alcohols and a great variety of fatty acids. A small percentage of free alcohols is also present. $^{(1, 4)}$ 

Table 1 contains analytical data for lanolin U.S.P.

	Ester No.	Iodine No.	Hydroxyl No.
Sample A	89.4	29.8	29.9
Sample B	97.0	28.1	31.9
Sample C	95.2	27.4	36.7
Sample D	98.8	25.0	33.8

Table 1-Analytical Data for Various U.S.P. Lanolins

Note that the ester number ranges from approximately 89 to 98; the iodine number from 25 to 30; the hydroxyl number from 30 to 37.

This data discloses the presence of the reactive groups which can be utilized to form derivatives. Lanolin can be split into acid and alcohol components by saponifica-

<sup>\*</sup>American Cholesterol Products, Inc., Milltown, N. J. Paper presented at a meeting of the Society of Cosmetic Chemists, May 13, 1955, New York City.

tion of its esters. Although the complete saponification of lanolin is difficult to achieve, this has been accomplished(7). Lanolin alcohols, and extracts and fractions thereof, are now widely used as surface active topical emollients. Displacement reactions, also based on ester linkages, have resulted in water soluble derivatives of lanolin. Other products may be looked for in the future based on this approach.

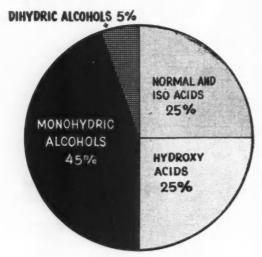


Figure 1—Lanolin Esters

The iodine number indicates the presence of unsaturated bonds. One usually associates unsaturation with instability. However, in lanolin the double bonds, which are present in the alcohol portion of the ester, are relatively stable. Reactions on these double bonds have led to a series of derivatives by means of hydrogenation, oxidation and sulfonation.

The hydroxyl number of lanolin indicates a substantial content of free hydroxyl groups, which was erroneously ascribed to free alcohols in the older literature. Figure 1 is a graphic description of the lanolin esters which constitute about 96 per cent of lanolin. The purpose of this chart is to illustrate the distribution of the hydroxyls among the components of the lanolin esters. This schematic presentation omits any detailed listing of the various acids and alcohols since that material was presented in a paper before this group earlier(4). Note that the alcohols and fatty acids each constitute about 50 per cent of the esters. A subdivision is made based upon hydroxyl groups. Most of the alcohols (45 per cent on the graph), which include sterols, aliphatic alcohols and triterpenes, have a single hydroxyl group and are called monohydric alcohols. A small percentage (5 per cent on the graph) of the alcohols, however, has two hydroxyl groups and are known as dihydric alcohols.

In the fatty acid half of this pie graph, there is an approximately equal division between hydroxyacids (25 per cent of the esters) and fatty acids without hydroxyl groups (comprising the remaining 25 per cent). One can calculate with analytical data, that esterification of all the acids with all the alcohols will leave an excess of hydroxyl groups. Those esters which have a free hydroxyl group are known as hydroxyesters. They may be formed from the reaction of normal and iso acids with dihydric alcohols, or of hydroxyacids with either type of alcohol (monohydric or dihydric), Hydroxyesters are responsible for the major part of the hydroxyl number of lanolin and comprise a substantial percentage of the total esters.

#### **Acetylated Derivatives**

With this as a background, the synthesis of those derivatives of the hydroxyesters of lanolin which could theoretically be expected to have interesting characteristics was investigated in our laboratory. These derivatives were prepared by acylation of the hydroxyesters, resulting in replacement of the hydrogen of the hydroxyl group with an acyl radical. The derivatives possess new properties of interest to many industries. They are rapidly becoming important cosmetic and pharmaceutical ingredients.14

Figure 2 illustrates the esterification reactions which

are of interest in this study.

The first type is a simple ester of a fatty acid with an alcohol. A typical example would be cholesteryl stea-

The second type, of which cholesteryl hydroxypalmitate is an example, is an ester in which a free hydroxyl remains on the fatty acid portion of the compound.

The third reaction described is typical of the procedure we have developed to modify lanolin by acylation of hydroxyesters. An acetyl radical replaces the hydrogen of the hydroxyl group resulting in an acetylated hydroxyester which, in this case, might be called the acetate of cholesteryl a hydroxy-palmitate. It is interesting to note that the hydrophilic properties of the lanolin hydroxyesters are lost as a result of this reaction. The acyl radical need not be limited to acetic since we have successfully used propionic, benzoic and related acid radicals. This presentation, however, is limited mainly to a discussion of the acetylated derivatives.

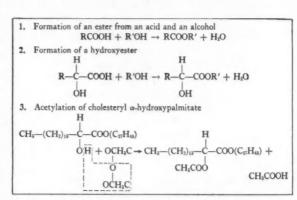


Figure 2—Formation and acetylation of hydroxyesters

Acetates are widely distributed in nature both as salts and as esters. They have been identified as constituents of perspiration. They are used both internally and externally in such varied products as aspirin and desoxycorticosterone acetate U.S.P. In addition, there is abundant evidence that acetic acid is metabolized and serves as a food(8). Acetates have been used for years in antiperspirants, deodorants, perfumes and flavors. Greenberg and Lester in their book entitled "Handbook of Cosmetic Materials"(9) state that "there is no evidence of allergic responses (to acetic acid); on theoretical grounds there should be none." It has been well established that acetates are basic building blocks from which compounds such as cholesterol, certain hormones, and vitamins are biosynthesized.

Table 2 presents data comparing a typical U.S.P. lanolin to its acetylated derivative.

	Lanolin U.S.P.	Acetylated Lanolin
Ester no.	95	110
Acid no.	Approx. 1	Approx. 1
Iodine no.	27	27
Hydroxyl no.	32	2
Water sol. acids (U.S.P.)	Neutral to litmus	Neutral to litmus
Melting point (U.S.P.)	39°C.	36°C.
Specific gravity	0.935 at 25°C.	0.935 at 25°C.
Color	Pale yellow	Pale yellow
Odor	Typical	Practically odorless
Mineral oil solubility	< 0.5%	10%
Emulsification	W/o	None
"Feel" on the skin	Tacky	Waxy

Table 2—Comparative Data on Lanolin and Acetylated Lanolin\*

( \* Modulan-Registered trade mark of American Cholesterol Products, Inc.)

It will be noted that, as a result of the acetylation, the hydroxyl number drops from 32 to 2. Other changes are: an increase in the ester number from 95 to 110 and a decrease in the melting point by about 3°C. The loss of free hydroxyls in acetylated lanolin renders the product hydrophobic, and its physical properties are affected accordingly. The modified product forms clear solutions in mineral oil whereas the original product tends to precipitate and form cloudy solutions in oil. Lanolin forms water-in-oil emulsions, one of the typical and best known characteristics of this product. The acetylated product does not form these emulsions, although it may be used in water-in-oil preparations in low percentages to add emollience. It is, however, readily dispersed in the opposite type of emulsion, i.e., oil-in-water, and in soaps and shampoos, where it has a stabilizing effect on the foam. In addition, the modified product is waxy rather than tacky, and exhibits a marked odor change, from that typical of lanolin to a very faint, pleasant odor. Another change brought about by acetylation of lanolin is the increase in plasticity. The acetylated product retains an ointment-like consistency even at refrigerator temperatures whereas lanolin stiffens to the point where it is difficult to remove it from a collapsible tube.

It is interesting to note that with the exception of water absorption, the acetylated product meets the requirements of lanolin U.S.P., although, of course, chemically it is quite different.

#### **Allergic Reactions**

Allergic reactions to lanolin are relatively rare. However, the widespread use of this product has increased the awareness of allergists and dermatologists to the existence of such reactions. A 1950 publication by Sulzberger and Lazar indicated that the allergen responsible for sensitivity to lanolin was present in the mixed

alcohol fraction. The presence of substantial quantities of hydroxyesters in lanolin, also known as wool fat, constitutes a major difference between wool fat and human skin fat. Our laboratory felt that it would be of value to investigate the allergic activity of our lanolin products which did not have free hydroxyls. Sulzberger's group was interested in testing these derivatives on lanolin-sensitive patients. The findings of Sulzberger, Warshaw and Hermann have been published(11, 12), and are probably known to you. Working with the acetylated and propionylated products which we prepared, they were able to show that these substances evoked significantly lower incidence of positive skin reactions than did the original lanolin. Recently Everall and Truter(12 isolated the sensitizing factor as a yellow, glassy solid which appeared to be an impurity in the alcohol fraction. After acetylation of this substance, the product gave a negative result on patch testing.

#### **Acetylated Lanolin Alcohols**

As an extension of our investigation of acetylated lanolin, we carried out the same type of reaction on lanolin alcohols. These constitute approximately 50 per cent of lanolin from which they may be separated by a series of steps involving saponification, extraction and purification. Lanolin alcohols consist of sterols, aliphatic alcohols, triterpenes, and a small percentage of hydrocarbons. The acetylation of the total alcohols did not result in a satisfactory product for use in cosmetic applications. However, after further investigation we obtained a low-viscosity, clear liquid fraction of acetylated alcohols which has interesting new properties. Data on this product is presented on Table 3.

This acetylated lanolin alcohol product is insoluble in water, but is soluble in all proportions in mineral oil, castor oil and vegetable oils. It is also miscible completely with 95 per cent ethanol, isopropanol, and

Table 3-Typical Data on Liquid Fraction of Acetylated Lanolin Alcohols

(\* Acetulan-Trade mark of American Cholesterol Products, Inc.)

Acid no	0.35
Hydroxyl no	
Ester no	
Soluble acids	Neutral to litmus by U.S.P. XIV method
Viscosity	
Melting point	
Color	
Odor	
Specific gravity	
Solubility in water	None (hydrophobic)—no emulsification
General solubility	Completely miscible in all porportions with the following
	Mineral oil Ethanol 95%
	Castor oil Isopropyl myristate
	Vegetable oils Isopropyl palmitate
	Isopropanol Butyl stearate
	Silicone fluid #555 (DC)



High pressure reactors used for the manufacture of acetylated lanolin derivatives at the American Cholesterol plant in Milltown, N. J. The kneeling figure provides an idea of the large size of the complicated equipment.

	Acid No. at Start	Acid No. at 30 Days	Change in Acid No.	Soluble Acids (U.S.P. Method)
Acetylated lanolin	0.96	1.01	+0.05	Neutral to litmus
Acetylated lanolin alcohols	0.19	0.24	+0.05	Neutral to litmus
Lanolin U.S.P.	0.77	0.82	+0.05	Neutral to litmus

Table 4—Effect of Aging on Acid Number in Presence of Water at 45°C.

Silicone Fluid #555 as well as with isopropyl myristate, palmitate and butyl sterate. It is extremely hydrophobic and yet readily dispersed in the presence of emulsifying and dispersing agents, soaps and shampoos. The product is an emollient with unusual spreading and apparent penetrating characteristics. By modern concepts, emolliency involves either holding water to the skin or lubrication. This product performs both functions.

Because of its chemical relationship to acetylated lanolin, it might be expected that the acetylated alcohol product would also have a low order of allergic activity against lanolin-sensitive persons. The paper previously cited by Everall and Truter<sup>(13)</sup> bears out this assumption. A report by the Industrial Toxicology Laboratories of Philadelphia confirms the innocuous effect of this acetylated lanolin alcohol product on a lanolin-sensitive patient. When larger numbers of lanolin-sensitive persons are available for testing, this work will be carried further.

#### Stability Studies

Studies were made to determine the effects of time, temperature and water on the stability of acetylated derivatives. Lanolin U.S.P. was used as a control.

Table 4 gives data on the change in acid number.

It will be noted that after thirty days at 45°C., in the presence of water, all three test samples exhibited the same insignificant change in acid number. The results of this accelerated test agree with aging tests carried out at room temperature for one year on anhydrous shelf samples. These extended tests are still being followed. Obviously, under conditions of normal use, the acetylated products do not hydrolyze. Formulations prepared with the acetylated lanolin alcohol product and sodium lauryl sulfate are stabilized by the inclusion of soap.

#### **Cosmetic Formulations**

The unusual properties of the acetylated lanolin derivatives prompted us to develop formulations which would demonstrate these properties in typical cosmetic preparations.

#### Lotion Oil-in-Water

This lotion formulation has a medium consistency, and is a smooth, emollient preparation of attractive appearance. It can be adapted by minor changes for use as either a hair groom, cleansing lotion or hand and body lotion. It has excellent stability and lends itself to simple manufacturing procedures.

#### FORMULA NO. 1

Acetylated lanolin alcohols (liquid fraction)	8.0%
Stearic acid	2.0
Glyceryl monostearate, neutral	.5
Amerchol L-101	8.0
Mineral oil, 70 vis	7.0
Microcrystalline wax, 170 m. p	4.0
Glycerin	4.0
Water	6.1
Triethanolamine	.4
Preservative and Perfume	q. s.

Procedure: Add the water containing the water-soluble materials to the melted oils with the temperature of both phases at 85°C. Mix slowly until cool and remix the following day.

#### **Vanishing Cream**

This is an emollient, vanishing cream type of preparation which could also serve as the basis for a brushless shave cream. It has smooth texture and excellent stability and can be readily adapted to a hand cream.

#### FORMULA NO. 2

Acetylated Lanolin	1	A	le	20	h	10	ı	8	(	1	ic	n	ui	id	l	f	r	a	et	i	0	n	)				3.0%
Stearic acid																											
Cetyl alcohol							ě															*					.5
Amerchol L-101 .												×															.5
Sodium hydroxide															*	×											.8
Propylene glycol .																											
Water																											63.2
Preservative and I																											

Procedure: Add the water containing the water-soluble materials to the melted oils with the temperature of both phases at 85°C. Mix slowly until cool and remix the following day.

#### **Antiperspirant Cream**

Antiperspirants formulated with acetylated lanolin products impart a non-greasy, highly emollient film which does not interfere with the activity of the aluminum chlorhydroxide complex. This formulation has a glossy surface and a smooth texture and is quite resistant to drying out.

#### FORMULA NO. 3

Acetylated lanolin or Acetylated lanolin alcohols (liquid fraction) 2.0	9
Spermaceti 4.0	
Propylene glycol 3.0	
Amerchol L-101 3.0	
Polyoxyethylene propylene glycol monostearate 2.0	
Polyoxyethylene stearate 2.0	
Glyceryl monostearate, acid stable 17.0	
Water 28.0	
Chlorhdrol 50% solution 38.0	
Titanium dioxide 1.0	
Preservative q. s.	

Procedure: Add the water to the melted oils with the temperature of both phases at 80°C. Mix slowly until well mixed. Add the Chlorhydrol solution, titanium dioxide and preservative while continuing the mixing. Mix until cool and remix later if necessary.

#### Hair Treatment Cream

This hair treatment formula is valuable for other purposes as well. Although very emollient and with many of the characteristics of a water-in-oil cream, the preparation inverts to oil-in-water upon the addition of water, and is then readily washed off leaving an emollient residual film.

#### FORMULA NO. 4

Acetylated lanolin alcohols (liquid fraction) or	
Acetylated lanolin	3.5%
Glycervl monostearate, self emulsifying	3.5

Spermaceti	1.5
Amerchol L-101	9.0
Mineral oil, 70 vis.	8.5
Glycerin	4.5
Water	59.5
Preservative and Perfume	q. s.

Procedure: Add the water containing the water-soluble materials to the melted oils with the temperature of both phases at 85°C. Mix slowly until cool and remix the following day.

#### All-Purpose Cream

A soft all-purpose cream of glossy texture—this emollient cream is non-whitening on rubbing out. It may be washed off or left on. In either case an emollient non-greasy film is imparted to the skin.

#### FORMULA NO. 5

Acetylated lanolin alcohols (liquid fraction)	
Acetylated lanolin	2.0
Diethylene glycol monostearate C	2.0
Stearic acid	2.0
Cetyl alcohol	.5
Triethanolamine	1.0
Water	82.5
Preservative and Perfume	q. s.

Procedure: Add the water containing the water-soluble materials to the melted oils with the temperature of both phases at 85°C. Mix slowly until cool and remix the following day.

#### **Cold Cream**

This is a very smooth-textured formulation with a whipped cream consistency. It has unusually good spreading and cleansing properties as well as excellent stability.

#### FORMULA NO. 6

Acetyla Acetyla															d	1	fr	a	ıc	ti	0	n	)					1.0	%
Beeswa	κ.																											17.0	
Mineral	oil.	. 7	0	vi	s.																							45.0	
Amerch	ol L	-1	01																									3.0	
Water																										. ,		33.0	
Borax																													
Preserv	ativ	e	al	nd		P	e	rf	fu	ır	ne	e																. q.	S.

Procedure: Add the water containing the water-soluble materials to the melted oils with the temperature of both phases at 85°C. Mix until cool and fill containers.

#### **Anhydrous Preparations**

Brilliantly clear oil solutions are readily formulated with these acetylated lanolin derivatives.

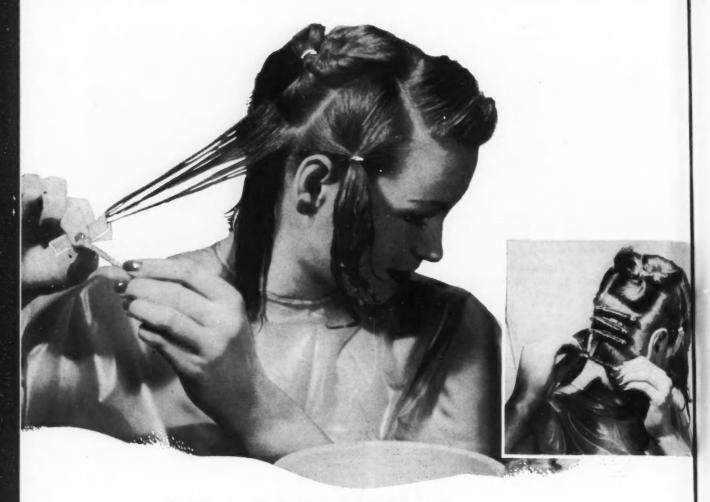
The products are clearly soluble in cold mineral oil resulting in preparations which are emollient and also hydrophobic: an obvious advantage where it is desired to protect against wetting.

Both the acetylated lanolin and acetylated lanolin alcohol products have been tested for spectral transmittance in the ultraviolet region of the spectrum with a quartz prism monochromator. The results indicate that these products are not effective sunscreens. However, the use of these products as inclusions in sunscreen preparations is a valuable application since spread, penetration, emollience and hydrophobic activity are advantages to be gained. Further tests must be carried out on humans to complete their evaluation in sunscreen formulations.

#### FORMULA NO. 7

	Baby Oil or Brilliantine	
Acetylated lanolin	alcohols (liquid fraction)	or
Acetylated lanoling		5.0%
Mineral oil		95.0

(Continued on page 48)



#### Experiments with the Mercaptan-Disulfide System Indicate Profound Implications

#### Editor's note:

In the first part of this paper, given at a seminar of the Society of Costmetic Chemists in New York City, September 23, 1954, Mr. Whitman presented a three-way equation to describe human hair in any degree of reduction or neutralization:

in which WSSW indicates the cystine bond in keratin, WSH indicates a cysteine terminal linkage arising from the breaking of a WSSW, and WSSR indicates a mixed disulfide cystine terminal group, the R representing the body of the mercaptan reducing agent used in the process.

The speaker further developed five equations which, when solved simultaneously by conventional methods, yield values for each of the five components shown in this equilibrium:

(1) (Cystine) = 
$$A + B/2 + C/2 + D/2 + E/2$$

(2) 
$$(Cystine)_{anal.} = A + C + E$$

(3) 
$$B + E = C + D$$

(4) 
$$(Cysteine)_{anal.} = B + D + E \frac{D}{DC} + C \frac{B}{BE}$$

The juxtaposition of the terminal groups formed by the severance of the cystine bond was described by the speaker, and the following three equations, which show the frequency of the occurence of the three possible patterns, were developed.

(6) SH - HS = B 
$$\frac{D}{D+C}$$

(7) 
$$SH - RSS = E \frac{D}{D+C} + C \frac{B}{B+E}$$

(8) 
$$SSR - RSS = E \frac{C}{C + D}$$

We publish here only the latter part of Mr. Whitman's report, in which he describes experiments conducted in the Rayette laboratories and comments on data developed from the equations set forth above.

# NEUTRALIZATION IN Permanent WAVING

Ross Whitman

A LARGE shock of virgin hair was divided into twenty-eight 2-gram tresses. One tress was analyzed for cystine content (to give us "(Cystine)O"). The remaining twenty-seven tresses were divided into groups of three and the following experimental processes were carried out in triplicate.

Experiment 1: The hair was wound on rods and reduced with a conventional thioglycolate lotion for twenty minutes under a nitrogen atmosphere. The lotion was 0.85 N in ammonium thioglycolate and 0.72 N in ammonia. At the end of twenty minutes' exposure to this lotion, the reaction was "stopped" in absolute isopropanol and the requisite analyses were carried out.

Experiment 2: Triplicate samples of hair were treated as in Experiment 1 with a lotion analyzing 0.85 N in ammonium thioglycolate, 0.72 N in ammonia and 0.5 M dithiodiglycolate.

Experiment 3: The experiment was repeated with a lotion analyzing 0.85 N ammonium thioglycolate, 0.72 N ammonia and 2.3 M ammonium dithiodiglycolate.

Experiment 4: In this experiment the lotion was 0.85 N ammonium thioglycolate, 0.72 N ammonia and 2.3 M ammonium succinate.

Experiment 5: Here the hair was reduced with the

same lotion that was used in Experiment 1. After twenty minutes' reduction the hair was thoroughly washed (for about thirty minutes) with oxygen-free water, and thereafter it was rinsed repeatedly with a 1 N solution of sodium bromate.

Experiment 6: In this experiment the hair was reduced with the same lotion which was used in Experiment 3, and it was then neutralized with 1 N sodium bromate as in Experiment 5.

Experiment 7: The hair was reduced as in Experiment 1. It was then rinsed for twenty minutes in 2 M ammonium dithiodiglycolate, and thereafter it was oxidized with a 1 N sodium bromate solution for twenty minutes.

Experiment 8: The hair was reduced exactly as in Experiment 1. It was then neutralized with a solution which was 1 N in sodium bromate and 0.2 M in ammonium dithiodiglycolate.

Experiment 9: Finally, the hair was reduced for twenty minutes with the lotion of Experiment 1 to which had been added 35 p.p.m. of manganese chloride. After the twenty minutes of reduction, the hair was allowed to air oxidize on the rod for 150 minutes. At the end of that time the hair was quite dry. It was then "stopped" in isopropanol, and the analyses were carried out.

The following table lists the analytical values obtained, expressed as millimoles per gram of hair.

Experiment	$(SS)_{o}$	(SS) <sub>A</sub>	$(SH)_A$
1	0.715	0.535	0.444
2	0.715	0.678	0.243
3	0.715	0.726	0.074
4	0.715	0.669	0.155
5	0.715	0.692	0.045
6	0.715	0.744	0.022
7	0.715	0.773	0.032
8	0.715	0.718	0.048
9	0.715	0.797	0.020

The probable errors in these determinations were  $\pm 0.006$  for the cysteines and  $\pm 0.003$  for the cysteines.

#### Discussion

Looking first at Experiments 1, 2 and 3, it is apparent that as the ammonium dithiodiglycolate content of the lotion is increased, the level of reduction of the treated hair is very markedly decreased. While some inhibiting effect might well be expected, the fact that the apparent final cystine content in Experiment 3 exceeds the original content is, on the face of it, inexplicable.

In Experiment 4 ammonium succinate was introduced in place of the ammonium dithiodiglycolate of Experiment 3 in an effort to distinguish between the salt effect of the ammonium dithiodiglycolate and the disulfide effect. In Experiment 4 we see that the cysteine content is considerably higher than following the treatment of Experiment 3 and that the cystine content is significantly lower.

Experiments 5 through 9 were designed to show some of the anomalies in the neutralization process which the algebraic treatment of these values will clarify. Comparing the results of Experiments 5, 6 and 9, in this table, one would certainly conclude that the neutralizing procedure used in the latter was considerably superior to the neutralizing procedure used in the first. (I am sure that we have all been embarrassed by the superfluity of cystine which occasionally arises. We all share, of course, the wish for nice high cystines after a permanent wave, but we prefer them not to be as high as the analyst found after Experiment 9!)

Reprinted from Journal of the Society of Cosmetic Chemists, Vol. VI, No. 5, page 387.

Since the values of Experiments 7 and 8 are intermediate, they do not justify any special comment.

The following table gives the values for the individual components in the system as calculated from these analytical values and also shows the frequency of occurrence of the terminal groups described in Equations 6, 7 and 8. All values are reported as millimoles per gram of hair.

clear and logical. The true cystine content (A) never exceeds the original cystine content of the hair. A comparison of the results of Experiment 5, Experiment 6 and Experiment 9 shows that Experiment 5 represents a considerably superior method of neutralizing, and the Experiment 9 procedure is very, very poor indeed.

Excessively long processing times, which give rise to RSSR through air oxidation of the mercaptan, should

Experiment	A	B-D	C-E	SH-HS	SH-RSS	SSR-RSS
1	0.491	0.202	0.022	0.182	0.040	0.002
2	0.574	0.089	0.052	0.056	0.066	0.019
3	0.658	0.023	0.034	0.009	0.028	0.020
4	0.634	0.064	0.018	0.050	0.028	0.004
5	0.692	0.023	0.000	0.023	0.000	0.000
6	0.674	0.006	0.035	0.001	0.010	0.030
7	0.640	0.009	0.067	0.001	0.015	0.059
8	0.681	0.016	0.019	0.007	0.017	0.010
9	0.623	0.005	0.087	0.000	0.010	0.082

The probable errors for the values in this table are as follows:

$A \pm 0.006$	SH-HS	$\pm 0.006$
$B-D \pm 0.0003$	SH-RSS	$\pm 0.010$
$C-E \pm 0.006$	SSR-RSS	$\pm 0.006$

A detailed study of this table is, we think, rewarding. I do not propose to exhaust the substance of these data here today. I would like, however, to make a few general observations.

Comparing the values for the first three experiments, we see that introduction of ammonium dithiodiglycolate to the reducing system has greatly increased the mixed disulfide content, surely by inhibiting the C-D portion of the equilibrium. The frequency of SH-RSS configuration goes down as the ammonium dithiodiglycolate is increased from Experiment 2 to Experiment 3. This is due to the retarded reduction rate (note the lower cysteine values in the preceding table), but even at this lower level of reduction the SSR-RSS configuration is very, very high.

The results of Experiment 4 show that whereas the level of reduction was inhibited by the introduction of the bi-functional salt, the C-E terminal values are as high as in Experiment 1. Generally, as the ionic strength of the solution is increased, maintaining the RSH concentration, the percentage of RSSW groups goes up. This finding has been repeatedly confirmed in our experiments.

Whereas the neutralizing experiment results reported in the preceding table could not be explained, when the data are presented as in this table the conclusions are be avoided to reduce the formation of the mixed disulfide WSSR. Experiment 7, as a departure from Experiments 1 and 5, points up this danger.

The equality of the C-E values in Experiments 3 and 6 is extremely significant, we think, in the consideration of the whole neutralizing process. It emphasizes the fact that the SSR-RSS configuration is not directly convertible to cystine bonds by oxidation.

Let me show you one more table in which the total number of bonds broken at the end of each of these nine experiments is reported as the per cent in each configuration.

Experi- ment	Total Cystines Broken (mM/g. Hair)	SH-HS, %	SH-RSS, %	SSR, RSS, %
1	0.224	81	18	1
2	0.141	40	47	13
3	0.057	16	48	36
4	0.082	61	34	5
5	0.023	100	0	0
6	0.041	2	24	74
7	0.075	1	20	79
8	0.186	21	49	30
9	0.092	0	11	89

The fact that the distribution of these terminal configurations can vary so remarkably is surely one for all researchers in permanent waving processes to ponder. The implications which this has for the neutralizing process are, in our opinion, profound.

#### HISTORY OF THE PERMANENT WAVE

Ancient Egypt: The earliest recorded method of permanent waving consisted of having the hair wound in small strands around thin sticks, packed in mud, and dried in the sun.

America, 19th century: Curling tongs heated over the chimney of kerosene lamp frizzed the ladies' hair.

Paris 1872: Marcel Grateau invented the Marcel wave, in which the hair was wound on a heated iron bar and clamped down with a hinged device.

London, 1905: Charles Nessler demonstrated the

first modern permanent wave, using an alkaline paste to soften the hair. In 1909 electricity was incorporated into the process to provide the heat.

America, 1940: Cold waving was introduced. The hair was soaked in a solution which changed, without heat, the molecular arrangement of the hair strands.

America, 1948: The home permanent kit containing waving and neutralizing solutions permitted the housewife to wave her own hair.

—Abstracted from "Revolutionary Indeed," Breck Gold Box, XI, No. 1, January 1956.

## Second Annual Symposium on Fragrance of American Society of Perfumers

Over 300 perfumers

and executives from leading

companies witness the award

of honorary membership to

William A. Poucher



Chairman Everett D. Kilmer opens the session

A LARGE and appreciative audience of well over 300 perfumers and executives from the leading companies in the cosmetic industry got much useful information on pre-market testing and other aspects of consumer acceptance of fragrance from a carefully selected panel of experts at the second annual symposium of the American Society of Perfumers in the Essex House, New York, on the afternoon of March 21.

#### **Honorary Membership Conferred**

A highlight of the meeting was the presentation of a scroll conferring honorary membership in the American

President Christian F. Wight (right) makes the presentation of honorary membership

#### William A. Poucher

William A. Poucher has been associated with Yardley of London for 26 years. Considered one of the world's ten perfumers, he has created such world famous fragrances as Bond Street, Lotus, Lavensque and Flair. Other notable achievements include the authorship of "Perfumes, Cosmetics and Soap," now in its sixth edition. In addition, Mr. Poucher has contributed many scientific articles to the American Perfumer and other technical publications. He is the first honorary member from outside the United States. The Society of Cosmetic Chemists bestowed its Gold Medal Award on him in December 1954. It is indeed fitting that his outstanding contributions to the perfume industry receive the world-wide honor accorded them.



Speakers: Pierre L. Bouillette; Miriam Gibson French; Jack Mohr; Dr. Donald M. Powers; President Christian F. Wight at the right of speaker; Dr. Dean Foster, speaking; Moderator Frazer V. Sinclair; John R. Carr; Chairman Everett D. Kilmer, in background; Dr. Marvin Stein; Gustav Carsch; Irving Gilman; Eleanor K. Coen; Henry Brenner; and, on the extreme right, Jean Millon.

Society of Perfumers on the distinguished William A. Poucher, Ph. C., chief perfumer for Yardley & Co. Ltd. of London and widely known scientist, in recognition of his contributions to the advancement of the art of perfumery and cosmetic science through his books and numerous technical articles as well as his other services. The presentation was made at the conclusion of the afternoon session by President Christian F. Wight. The scroll read as follows: "The American Society of Perfumers confers honorary membership upon William A. Poucher, Ph.C. in recognition of his distinctive service to the perfumery and cosmetic industry." It was signed by Christian F. Wight, president and Oliver L. Marton, secretary. After the hearty applause which followed the presentation Mr. Poucher expressed his thanks for the honor and paid tribute to the association for the useful work it is doing.

Following this an informal cocktail party was held after which dinner was served.

Two days before the meeting the heaviest snowstorm of the Winter hit New York and seriously snarled traffic on the day of the meeting. As a result there was difficulty in reaching the Essex House at the south end of Central Park, which unfortunately delayed the commencement of the symposium. As there was a heavy program of twelve papers it was with much regret that the usual question and answer period had to be eliminated.

After welcoming the members and their guests, President Christian F. Wight introduced Everett D. Kilmer, chairman of the Symposium Committee. Mr. Kilmer, the

genius of the symposium, outlined briefly the scope of the symposium and then called upon Frazer V. Sinclair, the moderator, who incidentally has the distinction of being the first honorary member of the Society. With his usual skill, wit and tact Mr. Sinclair managed to keep the heavy program of twelve papers moving at a reasonable pace.

Due to the numerous papers all of which were replete with useful information, it is impossible to give more than the scantiest outline of the contents of any of them.

#### **GUEST SPEAKERS**

The first speaker was Pierre L. Bouillette Givaudan-Delawanna, one of the most popular after-dinner speakers in the industry, who took as his theme "A Perfume is Born." He was followed by Mrs. Miriam Gibson French, beauty editor, McCall's Magazine, who pointed out what fragrance means to women.

Jack Mohr of Lentheric, pinch hitting for Pierre Harang of Houbigant Inc., discussed "Perfume, the Big Gamble." As evidence of this he stated that some of the finest perfumes created die a-borning when they reach the market. Of 200 different perfumes created by leading houses in the last quarter century about 20 have survived. When Tweed was created 25 years ago it succeeded largely because it filled a needed want in the fragrance spectrum. Another odor introduced later with appropriate ballyhoo failed to succeed; and then along



Symposium Committee: Secretary Dr. Oliver L. Marton; President Christian F. Wight; Symposium Chairman Everett D. Kilmer; Ernest Shiftan; Andrew B. Farago; Pierre L. Bouillette.



came "Adam's Rib" which in two years has proved to be a hit and is now the No. 2 fragrance in the Lentheric line. A carefully considered program of continuous promotion was largely responsible for this.

Dr. Don Powers, director of cosmetic research, Warner-Lambert Pharmaceutical Co., took for his subject the "Use of the Non-expert Panel for Testing Cosmetic Fragrance." He pointed to the role played by fragrance in the development of better and different products and added that an inferior product can put a company out of business. On the other hand a quality product with the proper fragrance will almost always win out in the end. In panel testing there is often no unanimity of opinion. Some prefer deodorants and make-up bases without fragrance; some felt that night creams might well be lightly perfumed. Other examples were also given all of which tended to show that the performance of the product is closely allied with the fragrance. Consumer acceptance of the product's performance is the final test.

Dr. Dean Foster, director of laboratories, United States Testing Co., discussed "Laboratory Pretesting of Cosmetic and Fragrance Products." A fragrance to be successful must be good initially and must continue so. While the measurement of samples of fragrance is one of the most difficult tasks it can serve a useful purpose.

The basis of course is psychological.

John R. Carr, product manager for Revlon Products Corp. took as his paper "A Case History in Fragrance Testing and Evaluation." He outlined three phases: 1. A factual test of fragrance, a checking by sniffing. 2. Actual consumer testing of the fragrance. 3. Actual testing in the market.

Dr. Marvin Stein of the Hospital of the University of Pennsylvania discussed "The Role of Olfaction in Personality." He pointed out that the sense of smell has been neglected but that science is coming to the aid of the cosmetic industry, and some interesting data has been uncovered. To the infant there is no revulsion to fecal or other obnoxious odors because they are intimately related to his environment. As the infant grows up olfaction displeasure develops. While the field of odors in relation to behavior has been ignored, advances are being made and may be of value in the study of mental illness.

Gustav Carsch, chief perfumer, The Toni Co., gave an exposition of "An Olfactory Aptitude Test for the Selection of a Perfume Panel." The uses of the triangle test, with amplications, was explained in an interesting and lucid way for the selection of a perfume panel.

Irving Gilman, vice president of the Institute for Motivational Research discussed "Perfume and Human Motivation.'

Miss Eleanor K. Coen, consumer research manager, Lever Bros. Co., then presented her paper on "Measuring the Effect of Perfume Upon Product Acceptability." In doing so she outlined the history of Lifebuoy soap, the odor of which in the beginning was liked by men but not by women. When the odor was changed women accepted it. Also she showed how a change in the odor of Lux toilet soap in 1953 brought good results. Odor can



present were Pierre Coutin, president of the Essential Oil Assn. of the U. S. A.; John H. Montgomery, president, Fritzsche Brothers Inc.; Fred Shoninger, president of Antoine Chiris Co., Inc.; Dr. Ernest Guenther, author and scientist; and E. D. Morgan, Jr.



Arnold L. van Ameringen snapped with William A. Poucher, honorary member of the American Society of Perfumers; Dr. Donald H. Powers, director of cosmetic research, Warner-Lambert Pharmaceutical Co.; and Dr. Dean Foster, director of laboratories, U. S. Testing Co.

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LANOLIN CHOLESTEROLS in their most active form.

The Amerchols are safe, non-ionic, natural EMULSIFIERS, PENETRANTS and EMOLLIENTS. They will help you achieve superior cosmetic and pharmaceutical formulations by markedly improving stability, texture, appearance and effectiveness.

An Amerchol such as the multi-sterol, liquid Amerchol L-101 enhances softening, penetrating and spreading activity while holding desirable moisture to the skin. The surface active Amerchols function at the interface in oil-in-water emulsions to bring about these unique effects on skin and hair.

The Amerchals are ideal ointment bases since they are stable, induce rapid drug release, and promote optimum healing rates.

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Write on your business letterhead for technical literature and suggested formulas.



A group from the New York Chapter of the Society of Cosmetic Chemists at the Symposium: Vincent J. Defeo, Hazel Bishop, Harry Isacoff, Stephen G. Capkovitz, Mrs. Bettie Stanton, Ben Perry, Warren B. Dennis, Jr.

affect judgment about other properties of a product.

Henry Brenner, president of the Home Testing Institute then described the "Monadic Type Product Test."

Jean Millon, sales manager Coty Inc. the last speaker discussed "Psychological Oddities of Perfume and Fragrance." With his ready wit and sound practical sense born of 30 years experience in selling fragrance, Mr. Millon contributed much of value to the symposium. Thus he pointed out that in the span of years from 1916 to the present, out of 100 perfumes by leading houses on the market in 1916 only four remain as successes while ninety-six have disappeared. One reason for this he felt was lack of originality. In advertising, for example, too many stereotyped adjectives are used.

#### MEETING SERVED USEFUL PURPOSE

Unquestionably the Symposium served a very useful purpose in acquainting perfumers on the one hand about the problems involved in merchandising fragrance products and on the other in informing those responsible for sales about the importance of fragrance and the difficulties encountered in producing odors for extracts and cosmetics. It was noted that the large audience listened attentively to all of the speakers.

The success of the Symposium was due largely to the work of the Symposium Committee of which Everett D. Kilmer, a former president of the Society, was chairman. Other members of the committee were Pierre L. Bouillette, Andrew B. Farago, Dr. Oliver L. Marton and President Christian F. Wight, and Chairman of the Board Ernest Shiftan.

The American Society of Perfumers was founded in 1946 and in the span of ten years since then it has done much to advance the science and art of perfumery in the United States and to raise the professional standards of the perfumer.

Meetings are held monthly except during the Summer, which are addressed by experts in the industry; and once a year Ladies Night is held.

Officers of the association are: Chairman of the Board of Directors, Ernest Shiftan; President, Christian F. Wight; Vice President, Pierre Bouillette; Treasurer, Edwin D. Morgan; Directors: Kennth H. Walker, Theodore Bumiller Jr., Paul H. Lelong and Maurice Meunier.

## Why Management Should Check Scientific Research

I some one consulted you about a product that would grow hair on a bald man, you would very naturally be as skeptical as I was about eight years ago. But when my visitor mentioned the name of a very reputable physician who had conducted the research. I made a dive for the telephone. "No doubt about it," answered the doctor, "the stuff grows hair. We have a dozen

patients to prove it."

Naturally I went to look. In all honesty I must confess that there really was hair-a microscopic fuzz where it was obvious that nothing had been before. It was obvious, too, that there was nothing there now either, if you think of hair as I do. But the scientists were intrigued by any process that might produce even a single hair in what was presumably a dead area, and they were enthusiastic. Of course, on a strict interpretation of the definition, they were right.

This was a case of what I call the academic decimal point. It always balances months of costly effort, mountains of ingredients, against a microscopic result that is fascinating in the laboratory. But too often it is so infinitesimal in practical value as to be without logical or economic justification; and it is, of course, devoid of

all commercial possibilities.

When scientific investigation is undertaken for a business purpose, it should be undertaken in a businesslike manner. The ability to see that this is done is as well within the capabilities of a business executive as the solution of any other commercial problem that calls for the assistance of technical experts. Management does not surrender its responsibility merely because technical matters are involved.

The technical research team cannot assume management's responsibility for the usefulness of the results, and it must not be allowed to resent management's keeping control over the purposes of the investigation.

There should be a clear distinction between the right to prescribe the conditions of the test and the right to dictate the results. There seems somehow to have crept into the relationship the feeling that scientific work, if it is to be free and unfettered, must not be pointed in a direction that will have immediate commercial value. That, of course, is not at all true. The validity of research depends not on what is proved but on how it is proved.-Extract from a paper by Dr. Philip Reichert, vice president, Doherty, Clifford, Steers & Shenfield, Inc.

### Salesman's Morale

 ${f E}$  VERY sales executive has a kind of bank account of loyalty, respect, and morale on which he has to draw from time to time. Whenever a salesman is facing an extremely difficult situation, whenever you ask your salesmen to make an unusual effort, a withdrawal is made from that bank account.

On the other hand, whenever you demonstrate by some simple, clear means that you look upon your men as individuals, that you respect them, that you have confidence in them-whenever you stop backing them up and get out in the field and front them up-you make a deposit in that bank account.-Jack Sheffield.



The MODIFIED LANOLIN with new properties.

Modulan is chemically treated lanolin containing all the constituents of lanolin modified by a unique treatment to impart NEW and VALUABLE PROPERTIES.

Modulan forms clear solutions even in cold mineral oil and deposits hydrophobic, emollient films on skin and hair. These desirable protective films are waxy rather than tacky and are very pleasant to the touch.

Modulan is extremely hydrophobic does not form greasy emulsions and is practically odorless. Because of its outstanding compatibility with oil-inwater emulsions and with soaps and shampoos, Modulan is particularly recommended for use in creams, lotions, baby products, hair preparations, make-up, and ointments.

**CLINICAL INVESTIGATIONS HAVE** INDICATED THAT MODULAN IS HYPO-ALLERGENIC.



Write on your business letterhead for technical literature and suggested formulas.

#### (Continued from page 39)

#### FORMULA NO. 8

#### Sunscreen Oil

Acetylated	lanolin	01	0	ما	h	ما	c	(1	ic	12	i	d	1	-0	0	ti	0	n	1			01	Į×.			
Acetylated																									5.0%	
Sunscreen																								. :	2.0	
Isopropyl																								. 4	3.0	
Mineral oi	1																							50	0.0	

Procedure (for both): Where the acetylated larolin is used heat slightly in the mineral oil until clear. Remove from heat and add the remaining ingredients and mix cold.

These formulas are typical anhydrous solutions which remain brilliantly clear. Stable, hazy, colloidal lanolin solutions can also be prepared by combining the acetylated lanolin derivatives with mineral oil and ordinary lanolin.

#### Cream Shampoo

The acetylated products may be added to cream shampoo formulations without reducing foaming as is the case when lanolin U.S.P. is used. Other advantages of using them as superfatting agents are increased softness and manageability of the hair.

#### FORMULA NO. 9

Acetylated lanolin alcohols (liquid fraction)or	
Acetylated lanolin	
Stearic acid	8.0
Glyceryl monostearate, neutral	2.0
Amerchol L-101	4.0
Veegum, dry	1.5
Duponal WA paste 6	0.0
Water 2	0.0
Triethanolamine	1.5
Sodium hydroxide	.5
Potassium hydroxide	.5
Preservative	. S.

Procedure: Place all ingredients in one container and mix slowly while heating to 80°C. Continue mixing until cool and the desired consistency.

## Aerosols

Aerosols have become an important factor in the cosmetic and pharmaceutical industries. This formulation for a protective hand cream was not developed by us, but by the aerosol laboratory of a perfume company.\* The pH of the concentrate is 6.5. Stability and lack of corrosion was established after sixty days at  $100^{\circ}$ F., and at  $-20^{\circ}$ F. This product is a glossy white cream which imparts a non-greasy film having interesting protective qualities.

The modified lanolin products have applications in lipsticks because of their plasticity, emollience, solubility and penetration effects. Although bromo acids are insoluble in them, these materials, especially the acetylated lanolin alcohol product, do seem to increase penetration and staining. The hydrophobic property is also an advantage since it reduces the tackiness due to water absorption from the lips.

#### FORMULA NO. 10

## Aerosol Hand Cream

	Acetylated lanolin alcohols (liquid fraction
1	Stearic acid
	Glyceryl monostearate
	Polyoxyethylene lanolin derivative
	Preservative
3	Triethanolamine
	Propylene glycol
	Water

C Perfume ..... 92% Actives 8% Propellent-F-114-40% F-12 - 60%

Procedure: Heat A and B separately to  $80\,^{\circ}C.$  Add B to A slowly while mixing; when cool add C and mix.

The acetylated lanolin derivatives described and discussed in this report can be used advantageously in many other types of products for topical application, and merit continued investigation.

#### **Summary and Conclusions**

- 1. New lanolin derivatives were prepared by acetylation of lanolin hydroxyesters. Acetylated lanolin is particularly described and its chemistry discussed.
- 2. A liquid fraction of acetylated lanolin alcohols, of interest in cosmetics was also prepared, and is described.
- 3. As a result of the acetylation, the hydrophilic water-binding capacity disappeared and the material became hydrophobic in character.
- 4. Crystal-clear, fluid solutions of the acetylated products were obtained in mineral oil.
- 5. The tackiness, characteristic of lanolin-compounded cosmetics, was replaced by a waxy feel.
- 6. The acetylated products were found to be stable under conditions of normal use.
- 7. Typical cosmetic formulations prepared with these derivatives indicate their value in a wide variety of products for topical use.

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"Will you help me? I'm sick of being seen only during the full of the moon!

\* Dodge and Olcott, Inc.

Have you tried Myvacet® Distilled
Acetylated Monoglycerides in cosmetics yet?
You should, for there's nothing
quite like them. Made from fats or oils,
they're strangely non-greasy.

Myvacet Distilled Acetylated Monoglycerides, Type 5-00, a white solid at room temperature, provides a way of accomplishing the job ordinarily assigned to glycerol esters of stearic acid without making the product in any way greasy. It is very easily emulsified. The absence of greasiness and a great gain in flexibility make Type 5-00 highly interesting for many cosmetic formulation problems.

Type 9-40 is a clear, practically colorless liquid at room temperature. It is completely miscible with castor oil and with alcohol-water mixtures containing as much as 20% water. It does what isopropyl myristate and isopropyl palmitate do in many preparations but does it without contributing greasiness.

There are many things you can find out about Myvacet Distilled Acetylated Monoglycerides by testing samples in your own formulas. How about letting us send you a data sheet and samples? Write Distillation Products Industries, Rochester 3, N. Y. Sales offices: New York, Chicago, and Memphis • W. M. Gillies and Company, Los Angeles, Portland, and San Francisco • Charles Albert Smith Limited, Montreal and Toronto.

distillers of monoglycerides made from natural fats and oils



Also ... vitamins A and E... some 3500 Eastman Organic Chemicals for science and industry

Distillation Products Industries is a division of Eastman Kodak Company

## **SOAP SECTION**



Paul I. Smith

# Free Alkali IS SAFE IN SOAP?

HOW MUCH

T has been stated many times that the amount of free alkali that should be allowed to remain in a soap depends on many factors, e.g. the kind of soap being manufactured; the purpose for which the soap is intended: the market where the soap is to be sold; the conditions under which the soap is to be used. It is not, as some writers assume, a question of condemning a soap automatically if the free caustic content or the residual alkali content exceeds a certain arbitrary figure, which may vary from 0.1-1.0%.

The fact that soaps made from different fatty materials or fat sources vary considerably in their alkalinity is sometimes overlooked. Yet tests have consistently shown that whereas the sodium salts of coconut fatty acids vary only from pH 8.65 to 8.85 when 1% free alkali is present, the so called neutral olive oil and tallow soaps have a pH of 8.95 and 9.05 when no free alkali is present. Another point to bear in mind is that soap readily hydrolyses in solution with the formation of free alkali and the percentage formed in solution may well exceed that present initially in the soap. It is, of course, not possible to wash with an ordinary soap, and most

soaps are hydrolysing, without building up free alkali in the solution. The non-hydrolysing soaps do not as a rule possess the high detergent properties of the standard soaps.

Free caustic soda present in freshly made soap does not usually remain "free" very long, being largely converted into sodium carbonate by absorption of carbonic acid during drying or storage. It is now fully realized by soapers that a certain optimum percentage of residual alkali, some of which may be free caustic and the remainder carbonate, is actually beneficial and tends to retard rancidity changes which are more liable to take place in a so-called neutral soap. The presence of anti-oxidants and other additives designed to reduce the chance of rancidity are seldom as effective as alkali and often bring in their wake a train of troubles, such as discolouration and prema-

ture ageing.

It is, of course, realized that where a soaper is producing to specification he must, if he wishes to retain the order, produce a soap with the required alkali content. The point the writer wishes to make, however, is that there is no great merit in producing an alkali-

free soap and that "neutrality" may well prove a mixed blessing. Taking into account the many technical arguments concerning alkalinity in soap, one solid fact remains, namely that the optimum percentage of free alkali present in the soap should be sufficient to bring the pH of the soap solution up to the most favorable figure for washing and this may vary from about 10 to 12. Tests in the laboratory with the particular grade of soap being made should be able to give some useful guidance to the manufacturer on the percentage of residual free alkali that can safely be left in any particular grade of soap in which he is interested.

The arguments do not, of course, justify the presence of gross amounts of free alkali in soap, they merely put forward a balanced view with the object of being helpful to the soaper who is concerned with alkalinity in specific grades. What may be a safe percentage for household soaps would be unsuitable for toilet soaps, but even the latter may safely contain sufficient residual alkali to retard rancidity and to ensure that washing is carried out at an optimum pH, which is essential if a high rate of de1923 ANY OIL

1956



In perfumery too,
you can no longer rely on
just any oils.

Bertrand Frères is a prime source for the finest floral and essential oils.



## Bertrand Frères, Inc.

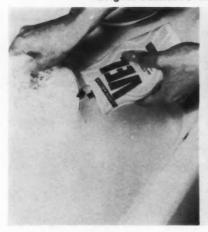
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## SOAP SECTION

## Colgate-Palmolive Tests Squeeze Can





The Colgate-Palmolive Co. is currently market testing a squeeze can for its liquid Vel detergent. Developed by the Bradley Container Corp., the can has walls and spout of polyethylene and ends of metal. It is sealed with a double-seal plug cap which is attached with a hinge to the spout to prevent loss. The spout itself fits into the metal top and is recessed so that the cans are easily stack-

able. It is said to be the first detergent package which is operated with one hand —the thumb unhinges the captive cap, and a squeeze on the sides releases a controlled stream of the detergent.

The exterior of the can is lithographed in pink and white stripes and blue lettering. The package is being marketed with the slogan, "One squeeze does a sinkful of dishes."

## Fortune Magazine Says P&G Is Still Champion

A comprehensive article in the March issue of Fortune magazine on the Procter & Gamble Co. says that after 118 years the company is going stronger than ever. Written by Spencer Klaw and titled "Winner and Still Champion: P. & G.," the story states that the company's annual sales, now nearing \$1 billion, have tripled over the last decade, and that its sales are approximately 50 per cent over the combined sales of its principal competitors, Colgate and Lever Brothers.

Among the facts revealed about the firm are:

P. & G. ranks twenty-eighth among all U. S. industrial corporations.

One or more of its products are used in ninety-five out of every one hundred U. S. homes, a penetration unequalled by any other manufacturer of anything.

It spends an estimated \$50 million on advertising, more than any other company except General Motors.

P. & G. in addition lays out \$20 million to \$30 million a year on coupon deals, prize promotions and other productions.

The company now markets two toothpastes, two shortenings, three shampoos, and three all-purpose detergents—all vigorously promoted under individual brand managers and in competition with one another.

P. & G. spends at least \$1 million a year on consumer research.

Today Procter & Gamble, which is not interested in doing any more manufacturing than it must and which does not process most of the raw materials which go into its consumer products, is primarily a marketing organization, one of the most formidable in the world.

## Premium Associates Takes Over Octagon Premium Plan

Premium Associates, Inc., an organization formed to take over the functions of the Octagon Premium Plan, one of the largest cooperative coupon redeeming operations in the country, has been inaugurated by the Colgate-Palmolive Co. The new company is jointly owned by Colgate; the Borden Co.; J. H. Filbert Inc., Baltimore manufacturer of Mrs. Filbert's mayonnaise; and William B. Reily & Co., New Orleans tea and coffee house.

The organization handles all coupon redemptions for the four owner compa-

nies as well as for other cooperating firms. The group is continuing the 49 premium stores and the 1,500 premium distributors of the Octagon plan.

Headquarters are in Newark, N. J. The entire staff of the Colgate premium department was taken over by Premium Associates. Officers are James W. Reily, Jr., president; John M. Davidson, executive vice president and general manager; and Harold G. Karn, vice president.

## Carter Products Wins "Rise" Patent Suit

The U. S. 4th Circuit Court of Appeals at Richmond, Va., has unanimously sustained a decision rendered last March by Federal Judge William C. Coleman, declaring valid all 21 patent claims of Carter Products, Inc., manufacturers of "Rise" shaving cream. The court held that the "Rise" patent was infringed upon by the pressurized shaving lather products of the Colgate-Palmolive Co. and the Stalfort Co., packer of Mennen products.

Circuit Judges Parker, Soper and Dobie approved an injunction against further infringement and ordered these firms to account to Carter Products for damages on all sales since the issuance of the "Rise" patent on October 13, 1953.

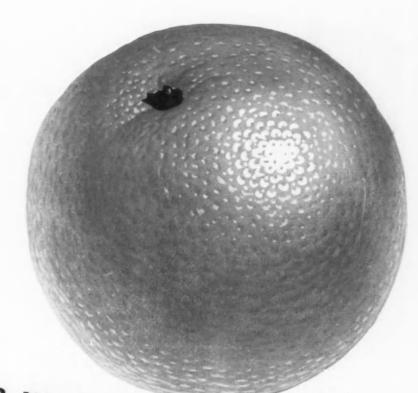
The Read Drug & Chemical Co., Inc. of Baltimore, Md., customer of Colgate and Mennen products, must also make an accounting to Carter Products.

Because of misappropriated trade secrets, Colgate is also liable for damages and profits even during the period before the patent was issued. The Circuit Court approved appointment by Judge Coleman of a master to determine the extent of these damages. Decision will be made later as to whether triple damages will be awarded against Colgate.

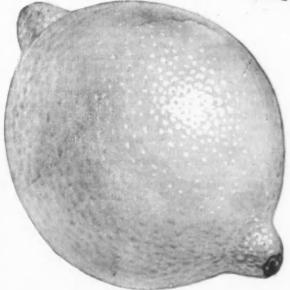
Colgate must also pay a considerable portion of Carter's legal fees in this suit. They involved expenditure of sums for the taking of depositions, summoning witnesses from foreign countries and engaging in other costly legal activities in what the court characterized as an "exceptional" case.

Colgate must turn over to Carter all patents and patent applications which Colgate has made on so-called improvements of "Rise." These include applications in the United States as well as numerous foreign countries.

Carter products previously licensed a number of leading manufacturers to make pressurized shaving cream. These include American Home Products Corp., Barbasol Co., Noxema Co. and Daggett & Ramsdell. Carter has licensed Procter & Gamble to produce "Drene" shampoo under these patents.



# yes, we have <u>no</u> bananas



YOU WILL AGREE that worthwhile citrus oils must retain all their delicate original flavour, and must be absolutely pure. Lanitis produce such oils.

The 1956 supply of Lanitis oils is of superb quality. If you want samples we will send them\*, proudly send them, because they are derived from the fruit by the very latest methods. These entail the minimum contact of oil with water during the process of oil extraction. No wonder Lanitis oils are comparable with oils produced anywhere else in the world.

\*write to: The Calvert Mills Co., 44 Whitehall Street, New York 4, N.Y.

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Hydrosol Flavours

Citrus Crushes



## PRODUCTS & IDEAS

#### TUBE FITTINGS-1

A simplified line of tube fittings which consists of two parts instead of the conventional three, requires no flaring of the tube and permits re-use of tubing, has been offered by the Jaco Manufacturing Co. The simplification of the fittings, which are made of Du Pont's "Zytel" nylon resin, is made possible by incorporating the compression section as an integral part of the nut. They can be used with any type of tubing, metal or plastic, and are available for tubing with outside diameters ranging from 1/4 through 1/8 inch. Pipe sizes run from 1/8 to 1/2 inch. Leak-proof connections can be made without indenting or "necking" the tubing, thus making possible re-use of both fittings and tubes.

#### **AUTOMATIC BOTTLE LABELER-2**

An automatic labeler for round bottles, the Pony 165, has been introduced by the New Jersey Machine Corp. The variable speed control delivers from 60 to 165 bottles per minute. It will take any stable round bottle of ½ to 3½ inches in diameter. The maximum label size is 51/2 inches wide by 5 inches high; the minimum 11/8 x 1/2 inches. The circulating glue system makes mixing of the glue an automatic function. Vacuum suction is said to extract the labels from the magazine without the aid of glue and to hold them while the adhesive is applied independently. This results in, according to the manufacturer, elimination of glue seepage, accurate registration and the release of skilled help for other duties.

#### PORTABLE AIR FILTER-3

A portable air filter said to remove all known gases and odors from the air has been developed by the Radex Corp. Called Smog-Free, the device uses an activated carbon filter to perform its action. The only installation required is plugging into a wall socket. The manufacturer claims that the unit removes odors and gases as well as smoke, dust and other contaminants from the air of an average living room within 20 minutes. An aluminum filter which catches dirt and dust particles is removable for cleaning; the activated carbon filter is used until saturated, usually for about 4 months, and then replaced.

## VACUUM BOTTLE FILLER

The Ertel Engineering Corp. manufactures a portable vacuum bottle filler which it recommends for small plants and as auxillary equipment for the filling of sample lots of liquids, for large producers. It is said to fill all sizes and any type of bottles, including the shaker type, efficiently and quickly. Continuous vacuum provides instantaneous flow of the liquid into the bottles. Spouts are the non-drip type and are adjustable for varying the filling height. A three spout adjustable handle, necessary tubing

and overflow piece are included as standard equipment on all but gallon sizes, where a two spout handle is standard.

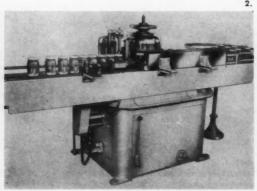
#### UNSATURATED ALCOHOLS

Unadol 40 and Unadol 90, unsaturated alcohols with two or more double bonds and one hydroxyl group, are available in tank-car quantities from the Archer-Daniels-Midland Co. They are non-corrosive, almost water-white liquids derived from domestic vegetable oils. The alcohols are oily liquids which resemble in appearance the oils from which they are derived, although they are lighter in color and have less odor.

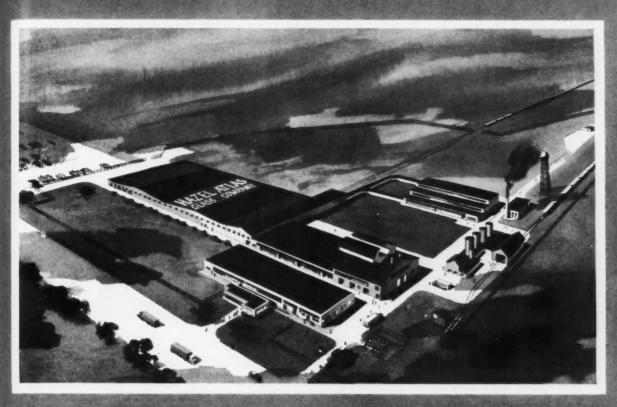
#### **ELECTRO-CALORIC FLOWMETER**

Industrial Development Laboratories, Inc. announces an Electro-Caloric Flow Meter for the measurement and control of the mass rate of flow of liquids. The rate of heat transfer through the boundary layer of a liquid is utilized to obtain a measurement of the flow. The manufacturer recommends the machine for corrosive fluids and gases, slurries, hydrocarbons, biologics and related products, and says that it meets the most stringent requirements for sanitation and safety. Its linear scale covers a wide range of flows, including pulsating ones. The device is fully electronic without mechanically moving parts. Maintenance, cleaning and service problems are said to be minimal.









Progress Pictures"



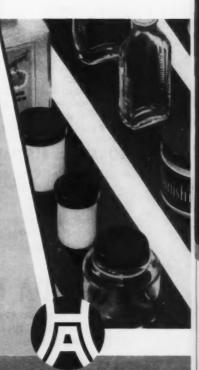
Two different pictures, but they complement

The new factory, now under construction at Plainfield, Ill., is indicative of HAZEL-ATLAS' continuing policy of greater service. But all H-A efficiency, quality control and design must add up to just one thing—and here's where the second picture comes in.

Our glass containers must be the welcome carriers of your products into the home. They must be selling showcases.

Each day more packers are finding that

H-A means Home Approved.



HAZEL-ATLAS GLASS COMPANY, WHEELING, WEST VIRGINIA

# Groda News



# ATTENTION: AEROSOL HAIR LACQUER INDUSTRY

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Further New Developments:

## LORAMINE ALKYLOLAMIDES

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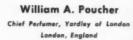
Clear Shampoos

## CRODA INC.

51 Madison Ave. New York 10, N.Y. MU 3-3090



This Month's Quiz Master





QUESTION I. Hydroxycitronellal is not generally considered a desirable ingredient in skin cream and lotion fragrances due to its irritation. Do you know of any way of overcoming this while still retaining its characteristic odor?

ANSWER. Strange as it may seem, I have found one make that is free from this possible disadvantage, and it has been used for years as a constituent in a perfume for a whole range of cosmetics made by a world famous company. The best way to test this synthetic is to first compound a series of Muguets or Lilacs with some of the best known brands, adding always one per cent of Peru balsam as a soothing agent for the skin, and then use, say half per cent of the finished compound, to perfume the skin food. The results may well come as a surprise to both research perfumer and chemist.

QUESTION II. Do you still think that Bulgarian Rose Otto is the best among those offered on the world market?

ANSWER. Yes, but it is difficult to purchase a grade that compares favourably with some of the finest pre-war makes, like Shipkoff and Pappazouglou. The nearest in quality is that produced in Morocco, where experimental work is proceeding apace, and may well result in the distillation of an otto in the near future that will approximate more closely to that from Bulgaria.

QUESTION III. How do you appraise African jasmine absolute alongside that of 100 per cent French origin?

ANSWER. African jasmine absolutes are now produced in Algeria, Morocco, and Egypt and of the three the first named is the finest. Yet, price for price, there is little to choose between it and the more fragrant Grasse Absolute, after final compounding in a standard formula for either a finished perfume, or say, a perfume for an expensive face powder.

## TECHNICAL

## abstracts...

The Use of Hydrogenated Cottonseed Oil and Hexadienol as Suppository Bases. By Charles W. Hartman and Joseph P. LaRocca, The Research Laboratories of the U. of Georgia School of Pharmacy, Athens. J. Am. Pharm. Assn., Sci. Ed., 45, 86 (1956). Suppository bases were formulated from mixtures of hydrogenated cottonseed oil and hexadienol with various other ingredients. Suppositories were prepared from these bases that were satisfactory with respect to appearance and consistency. The potential of the bases to release a medicament was determined by a colorimetric method. The effect of Veegum and other agents on the release of medicament from the base is reported. Suppositories made from these bases were stored for one year and the results of storage are reported. A more detailed study of these bases using other emulsifying agents is recommended.

Modern Ointment Base Technology I. Properties of Hydrocarbon Gels. By Margaret N. Mutimer, Charles Riffkin, John A. Hill, and Gilman N. Cyr. The Squibb Institute for Medical Research, New Brunswick, New Jersey. J. Am. Pharm. Assn., Sci. Ed., 45, 101 (1956). The disadvantages of petrolatum as an ointment base, i.e., greasiness, stickiness, and viscosity-temperature variations, can largely be overcome by the use of mineral oil gelled with certain waxes or resins, particularly polyethylene resin. The most desirable hydrocarbon gel appears to be one made by the very rapid chilling of a hot mixture consisting of 5 per cent polyethylene resin in U.S.P. liquid petrolatum. The critical factors in producing a good gel are: (a) the molecular weight of the polyethylene, (b) the percentage of polyethylene, (c) the viscosity of the mineral oil, and (d) the conditions of cooling.

A Study of Some Factors Influencing the Stability of Pharmaceutical Emulsions I. The Effect of Two-stage High Pressure Homogenization. By John D. Mullins and Charles H. Becker. College of Pharmacy, Univ. of Florida, Gainesville. J. Am. Pharm. Assn., Sci. Ed., 45, 105 (1956). The stability of oil-in-water emulsions prepared from four oils has been investigated. Emulsions were stabilized with

nonionic emulsifiers and with acacia. The effect of homogenization pressure was studied by passing all emulsions through a Manton-Gaulin homogenizer. Stability characteristics were evaluated by means of a size frequency method of analysis. Results indicate that specific interfacial area increases at a constant rate with increased homogenization pressure. Deterioration characteristics of the emulsions studied were found to be dependent primarily on the type of emulsifier used and, to a lesser extent, on the oil constituting the internal phase. Stability and homogeneity increased with homogenization pressure. Viscosity was not influenced.

A Study of Some Factors Influencing the Stability of Pharmaceutical Emulsions II. The Effect of Wax and Specific Gravity Adjustment. By John D. Mullins and Charles H. Becker. College of Pharmacy, Univ. of Florida, Gainesville. J. Am. Pharm. Assn., Sci. Ed., 45, 110 (1956). Oil-beeswax emulsions and emulsions in which the specific gravity of the internal phase was adjusted to equal that of the external phase were investigated. A size frequency method of analysis was used to evaluate stability. Results indicated that beeswax had no effect on emulsion stability. Adjustment of specific gravity decreased specific interfacial area but increased stability in some in-

Chewing Gum for Fluorine Prophylaxis. Frederick G. Merckel and Laszlo Reiner (to Wallace & Tiernan, Inc.) U.S. 2,700,012, Jan. 18, 1955. Preparation of several gums is described which contain 2 mg. of NaF per stick, a safe, effective, daily dose for fluorine treatment of the teeth. Thru C.A. 49, 7199e. Miscibility of Vegetable Oils and Alcohol. Y. K. Raghunatha Rao (Central Food Technol. Research Inst., Mysore).

Esters of p-Aminobenzoic Acid. Raul Roviralta Astpul. Span. 210,549, Dec. 30, 1953. Transesterification are used for the prepn. of higher esters of p-aminobenzoic acid (I) starting from Et p-aminobenzoate (II). E.G., Bu p-amino-benzoate (III) is prepd. by dissolving 1.5 g. Na in 900 cc. abs. BuOH, adding 650 g. of II and distg. at such a rate that ½ the contents are

removed in 5-6 hrs. The remaining solvent is removed under 30-40 mm. Hg, the residue allowed to cool and 11.95% EtOH added before the mass solidifies. This soln. is neutralized with AcOH, filtered, the solvent removed, and the III distd. under vacuum, br. 173-6°, m. 55-7°, III is purified by pouring an acetone soln. into water, filtering and redistg. Thru C.A. 49, 70000h.

Reaction of Aluminum with Carbon Tetrachloride. Herbert H. Uhlig (Massachusetts Inst. of Technol., Cambridge). Record Chem. Progr. (Kresge-Hooker Sci. Lib.) 15, 129-30 (1954; cf. C. A. 47, 11118 ce; 48, 1223d.—Boiling CCl4 reacts vigorously with Al by a free-radical mechanism to for AlCl4 and CaCl4. An induction period, which depends upon the conditions, precedes the reaction. Serious accidents can result when large amts. of reactants are used. Thru C. A. 48, 5192a.

2-Phenyl Benzothiazole—A Roselike Perfume? H. Dewein, Seifen-Ole-Fette-Wachse 16, 461 (Aug., 1955)—2-Phenyl benzothiazole is a composition of roselike scent. Its synthesis and preparation are described, and its use is discussed.

A Detergency Test Method Using Radioactive Carbon Black Soil. J. W. Hensley, M. G. Kramer, R. D. Ring, and H. R. Suter (Wyandotte Chem. Corp., Wyandotte, Mich.). J. Am. Oil Chemists' Soc. 32, 138-48 (1955).-Two new types of wash test app. designed for use with small disks of cloth soiled with radioactive C are described. One machine is a miniature type, employing a cloth to soln. ratio within the range employed in practical washing operations. Provision is made for evaluating whiteness-retention from measurements of soil redeposition on clean swatches. Soil-removal evaluations are made with a no. of different types of detergents with dry C soil and a C-mineral oil combination. The 2 soils give the same relative ratings. It is believed that the use of radioactive soils in lab. evaluations will permit studies with synthetic soil types approaching natural soils more closely than have the soils used in conventional methods. Thru C. A., 49, 7270b

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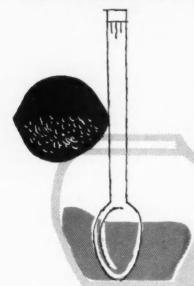


FINE CHEMICALS DIVISION SHULTON, INC. 45 ROCKEFELLER PLAZA NEW YORK

Morris B. Jacobs, Ph.D.



## PROPERTIES OF CUMYLACETALDEHYDE



This aromatic aldehyde whose synthesis was reported as long ago as 1923 has interesting flavor properties and an interesting history.

N my book Synthetic Food Adjuncts, which is presently out of print, I mention on page 152 an aromatic compound which is called cumylacetaldehyde. Relatively recently I received a letter asking if I knew of a manufacturer of this compound. I replied suggesting two possible manufacturers but as it turned out neither prepares this compound.

An employee of my original inquirer was evidently annoyed at this lack of success in obtaining a commercial source and wrote to tell me that the manufacturers suggested had never heard of cumylacetaldehyde and that "the head chemists of two of the largest flavor manufacturers in the country . . . also never heard of the above material." My second correspondent added, "I hardly expected an affirmative answer as I have spent twentyfive years as a flavor chemist and had never heard of Cumyl Acetaldehyde."

This, of course, is not at all surprising. Hundreds of synthetic and aromatic compounds have been suggested as flavor ingredients. Many are mentioned in Synthetic Food Adjuncts but it is clear by comparing the compounds described in Synthetic Food Adjuncts with those for which data are presented in the report of the United States Tariff Commission on synthetic organic compounds-production and sales, 19542 that many of the compounds listed in the former do not appear in the latter and therefore are not, with several important exceptions, made commercially on a large scale, if made at all.

The fact that many organic compounds described in the flavor literature as possible flavor ingredients are not manufactured on a commercial scale has been stressed in many of the articles published in this section of the AMERICAN PERFUMER AND AROMATICS and is certainly implied in Synthetic Food Adjuncts.

The following description of cumylacetaldehyde appears in the latter text: "Cumyl Acetaldehyde. Cumyl acetaldehyde, (CH<sub>3</sub>)<sub>2</sub>CHC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CHO, cumin acetaldehyde, 1-isopropyl-4-ethanal benzene, is a liquid with an odor which is much more agreeable than cuminaldehyde for it is more fruity. It has a bitter-sweet taste and an orange flavor. It boils at 243°C. Cumyl acetaldehyde can

## **FLAVOR SECTION**

be prepared from magnesium cumyl chloride and ethyl formate. It is used for arrack, lemon, orange, and woodruff flavors."

This information was gathered from the literature, like Wagner's *Aromastoffe*<sup>3</sup> and other sources and was necessarily brief since the compound was not an important flavor ingredient. Let us see what a more complete search of the literature reveals.

#### Bert's Work

In 1923 Léonce Bert¹ published an article entitled, "Synthèse d'une aldéhyde à odeur de verveine le mèthoéthyl-1-benzène-éthanal-4" which freely translated is, "Synthesis of an aldehyde of verbena odor; p-isopropyl-phenylacetaldehyde." In substance this article disclosed that treating cumylmagnesium chloride with triethyl orthoformate in toluene with boiling yielded an acetal which was readily changed by treatment with diluted sulfuric acid (in later work he used 5 N hydrochloric acid) to yield the aldehyde. The following series of reactions indicates what happens:

Bert then separated and purified his product by making the bisulfite addition product and regenerating the aldehyde. He described it as a light yellow liquid with a penetrating odor resembling, but somewhat less delicate than, verbena. The boiling point of this was found to be 243°C., and it gave typical aldehyde reactions with Tollens' reagent and with fuchsin but not with Fehling's reagent. The semicarbazone derivative had a melting point at 181°C.

## Chuit and Bolle

Shortly after the paper of Bert was published, Phillipe Chuit and Jules Bolle<sup>5</sup> published a paper entitled, Préparation de l'aldéhyde p-isopropylphénylacétique et de quelquesuns de ses isomères et homologues," which freely translated is, "Preparation of p-isopropylphenylacetaldehyde and some of its isomers and homologs." In this paper Chuit and Bolle stated that the work of Bert suggested that they describe a method which they had employed for several years; the implication being, of course, that they really had priority on the synthesis of this compound, a matter of great moment with many chemists. It is interesting to note here that the original abstract of this paper in Chemical Abstracts missed this point whereas a later abstract of Bert's work does mention it.

In their method of preparation Chuit and Bolle took reacted cumaldehyde, (CH<sub>3</sub>)<sub>2</sub>CHC<sub>6</sub>H<sub>4</sub>CHO, with ethyl chloroacetate, ClCH<sub>2</sub>COOC<sub>2</sub>H<sub>5</sub> in the presence of sodium ethylate, NaOC<sub>2</sub>H<sub>5</sub> to give the glycidic ester, beta-(4-

isopropylphenyl) glycidic acid ethyl ester. The latter is saponified and the aldehyde is recovered by steam distillation in the presence of oxalic acid. These investigators found their product to have the following properties: boiling point, under reduced pressure of 11-25 mm., 116.5-7°C.; density at 15 deg. C. 0.980; and refractive index at 20 deg. C., sodium line, 1.51071. The semicarbazone had a melting point of 172 deg. C.

Chuit and Bolle stated that the odor of this aldehyde resembled that of cuminaldehyde but was more agreeable and fresher and at the same time that of orange peel. They add that despite the divergence between themselves and Bert on the subject of odor which probably results from a difference in subjective appreciation and the lack of concordance in the melting points of the semicarbazones, namely 181 deg. C. as opposed to 172 deg. C., which might be due to the fact that Bert used a Maquenne block whereas Chuit and Bolle used the capillary glass tube method, they did not doubt that the two substances were the same.

#### Later Work

In 1925, Bert<sup>6</sup> published additional work on cumylacetaldehyde and related compounds in a paper on the synthesis on the *p*-cymene series from isopropyl alcohol using cumylmagnesium chloride. Here again he described this compound giving some additional details concerning its properties, namely, that the yield was about 30 per cent, the boiling point under reduced pressure (15 mm.) 120 deg. C., density at 16 deg. referred to 4 deg. C. 0.979, refractive index at 16 deg. C. sodium line 1.513.

Cumylacetaldehyde is difficultly soluble in water-and is readily soluble in organic solvents. It polymerizes gradually forming a viscous oil.

Subsequently in 1928 Bert<sup>7</sup> published additional investigations in this field as part of a new general synthetic method for the preparation of arylaliphatic aldehydes. In this method the magnesium derivatives of compounds of the type  $RC_6H_4(CH_2)_nCl$  are reacted with trimethyl or triethyl orthoformate to give the acetals, as noted above, and these on boiling with hydrochloric acid yield the corresponding aldehyde,  $RC_6H_4(CH_2)_nCHO$ .

In addition then to these references in which specific work is detailed as to the procedure of preparing cumylacetaldehyde, it is of interest to point out that Wagner, Burger, and Elze describe the compound in their book, Die Aldehyde,<sup>8</sup> and that there are descriptions by Burger<sup>9</sup> and in Schimmels Bericht<sup>10</sup> as well as in the reference already made to Wagner<sup>3</sup>. The compound, its method of preparation, its physical properties, appearance, odor, and the principal references to the literature are given in Beilstein.<sup>11</sup> There are references to the compound in the Chemical Abstracts of 1924, 1926, and 1928. Probably a more extensive search of the literature would disclose a number of other references.

#### Nomenclature

One of the difficulties in searching the literature of this compound as well as many other compounds is that the nomenclature used it not uniform. The empirical formula of cumylacetaldehyde is  $C_{11}H_{14}O$ . There are many isomers having this formula.

The compound having the formula (CH3)2CHC6H4-

# LAVOR

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Your customer goes to the store and brings your food product home. Packaging, promotion or impulse buying may account for this first time sale. But you haven't really sold her - not yet! You've just contacted her. Only quality food with unique taste-appeal can be counted on to bring her back again and again -and keep those registers ringing. Flavor goes out of the store with your customer-it goes to the table and becomes in essence your personal "door to door" salesman. The final impression this salesman creates decides the ultimate fate of your product. Let the D&O Flavor Laboratories make your silent salesman, FLAVOR, the best you've ever had!

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## **FLAVOR SECTION**

CH. CHO can be named in several ways depending upon whether it is considered to be a derivative of benzene or of acetaldehyde. Thus Bert considered it the former and named it methoethyl-1-benzene-ethanal-4 or in somewhat more recognizable nomenclature, 1-isopropyl-4ethanalbenzene as given in Synthetic Food Adjuncts. Beilstein and the Chemical Abstracts appear to prefer the latter for in most of those references the compound is called isopropylphenylacetaldehyde. Now the isopropylphenyl radical, (CH<sub>3</sub>)<sub>2</sub>CHC<sub>6</sub>H<sub>4</sub>—, has a distinctive name, namely, the cumyl radical, therefore the proper name of the compound we are writing about is, accepting it to be a derivative of acetaldehyde, cumylacetaldehyde; and this was the principal name given to the compound in Synthetic Food Adjuncts.

It is to be hoped that with this description of cumyl-

acetaldehyde and the references to the literature, the readers of this section of AMERICAN PERFUMER AND AROMATICS will be better acquainted with it.

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   A. Burger, Riechstoffindustric. 1, 116 (1926).
   Schimmels Bericht, 1924, 171.
   Belistein's Handbuch der Organischen Chemie; Zweites Ergänzungswerk, Vol. VII, System Nr. 640, page 255.

## Fiavored Notes -

N the manufacture of dimethyl terephalate from p-xylene by Hercules Powder's Imhausen xylene oxidation process, methyl p-toluate, CH3C6H4COOCH3, is also formed in sufficient amount to be a commercial product. The pure compound is a crystalline solid which melts at 33 deg. C., boils at 217 deg. C., is insoluble in water and is very soluble in alcohol. The commercial product is a white crystalline solid which melts at 34 deg. C., boils at 221 deg. at 760 mm. and at 151 deg. C., at 100 mm. It has a characteristic aromatic odor. It has been suggested for use with essential oils. This firm is studying its toxicological properties.

. As the readers of this column know people vary widely in their ability to distinguish things by taste and by smell. Persons who have lost their sense of odor may still retain their sense of taste. In a recent article in the Journal of the American Medical Association, E. C. Clark and H. W. Dodge of the Mayo Clinic object to the use of the word flavor to describe the sensation given by the taste of food for they think, correctly, that flavor implies the effect produced not only by taste but also by smell. Actually, as I have stressed from time to time, many other sensations are to be included in the composite sensation we term flavor. Clark and Dodge suggest that a better word to describe the sensation of taste without smell is savor, derived from the French meaning taste.-M. B. J.

## Symtomatic Corp. Publishes **New Flavor Catalog**

The Flavor Division of Syntomatic Corp. announces that its new Flavor Catalog is ready for distribution. It contains a list of the various types of flavors, flavor specialties, essential oils, terpeneless oils, and aromatics offered by the company. Data on the use of the various flavors described are given as well as the suggested proportions to be employed. The catalog includes a description of the Syntophar Flavors which are especially designed for flavoring pharmaceutical

The publication is a companion to the company's Perfume Oil Catalog. Both are available on request.

## Pfizer and Ferment-Acid Settle Citric Acid Dispute

An out-of-court settlement has been reached in the \$5 million citric acid patent suit brought by Ferment-Acid Corp., New York, against Chas. Pfizer & Co., Brooklyn, N. Y. The basis of the agreement is Pfizer's promise to pay \$220,000 for use of the patent during its remaining five years of life.

In a complaint filed in 1954, Ferment-Acid charged that Pfizer was wrongfully using a "deep fermentation" process for citric acid which was originally developed by Dr. Joseph Szucs, and also that the Brooklyn firm had improperly used confidential data disclosed by Dr. Szucs during a period when Pfizer investigated the process under a "look see" contract.

## **Dodge & Olcott Announces** 1956 Award Competition

Dodge & Olcott, Inc. announces that competition is now open for the 1956 D&O Achievement Award, presented annually for outstanding contribution to the meat packing industry. The award, established in 1954 as a service to the field, consists of \$1,000 and a gold medallion. It is presented to the person who, in the opinion of the judges, has been responsible for the most outstanding achievement contributing to the growth and general welfare of the meat packing industry as a whole. The contribution must have been made public during the award year.

## Dow Chemical Co. Offers **New Aromatics Catalogue**

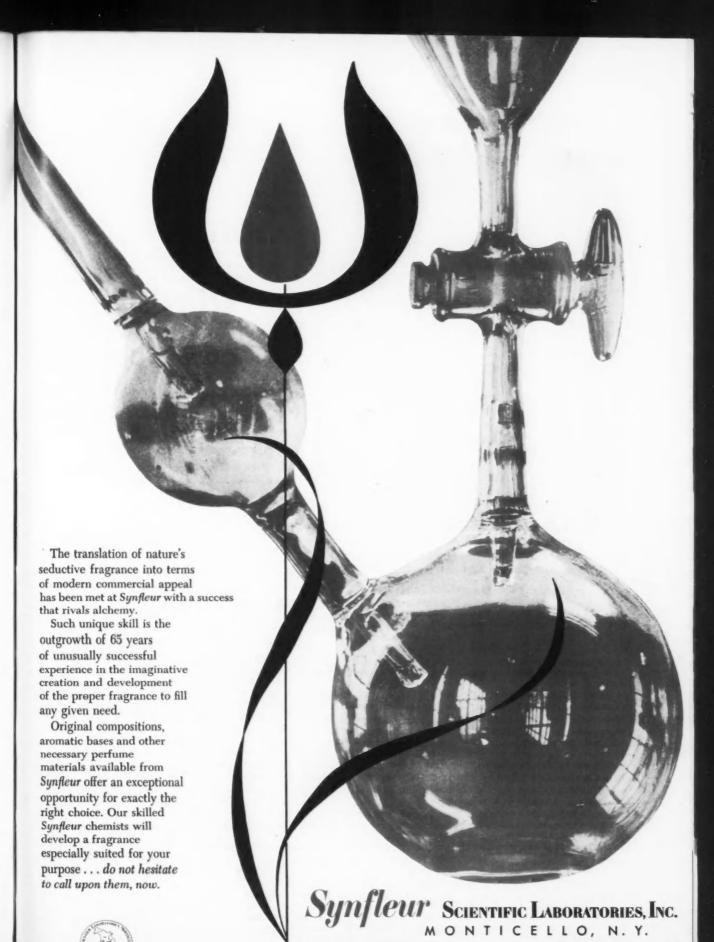
A new edition of its aromatics catalogue, "Handy Reference Guide to Aromatic Chemicals, Compounds and Specialties," has been released by the Dow Chemical Co. Its new format is pocket-

## Seeley & Co. (Canada) Ltd. Has New Quarters

Seeley & Co. (Canada) Ltd., has moved into its new building at 39 Densley Ave., Toronto 15, Ontario. The telephone numbers are CHerry 1-8659 and CHerry 1-8660.

## Chemway Corp. Releases **Annual Report to Stockholders**

Consolidated net sales of Chemway Corp. were \$7,836,933 in 1955 according to the recently released annual report to stockholders. The net earnings for the year equaled \$57,301 after taxes.



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Founded 1889 by Alois Von Isakovics



A typical spray drying unit.

# Spray Drying OF FLAVORS

Lyne S. Metcalfe

How the process operates . . . Entire cycle from fluid solution to the dried particle takes seconds and lends itself to automatic operation.

THE whole gamut of artificial flavors—strawberry, lemon, cherry, raspberry, etc.—have been successfully spray dried.

In some cases, spray drying has also been used to coat the individual flavor particles with an inert material which protects them until the time of use. This inert agent is dissolved when the powder is used, and the full flavor suffers no loss during shipment and storage.

Unquestionably, progress in the field of spray drying offers material for fruitful study, mainly because of its widespread use today in other processing and manufacturing activities.

Just what is this dry spray process and what does it offer the manufacturer?

Over the years since dehydration was first brought to the service of industry and the public, laboratory experimental work has gone constantly forward with the objective of

(a) simplifying older and more cumbersome methods of drying

(b) providing a concentrated product more flexible in use,

(c) reducing the cost of handling and shipping by reducing bulk and

(d) widening the number of liquids which may be concentrated.

The result is that today "spray drying" represents the amalgam of continuous studies and experiments and the work of improvement still goes forward.

What are these advances as typified in spray drying equipment design?

First, spray drying is enlisted for the processing of heat-sensitive materials now widely used in industry. It is also true, generally speaking, that with improved spray drying equipment and techniques, other processes, such as denitration, spray chilling, and blending can be achieved in the same operation.

## Advantage of Modern Spray Dryer

For instance, the modern spray dryer can make unnecessary such other operations as crystallization, secondary drying activities, grinding, screening, and/or materials classification, and can in this way reduce cost.

Spray drying, to put it simply, converts a solution (or slurry) directly and in a few seconds into a fine powder or small bead. This is accomplished by mixing intimately an atomized spray of the stock with hot air or hot gases which provide the heat required for de-

## **FLAVOR SECTION**

hydration. The dry powder is conveyed in the gas which has been cooled by the evaporation of the water to the dust collection apparatus.

In other words, modern spray drying is in reality the

drying of spray.

The material being sprayed bears within it dissolved or suspended solids and as the water or other solvent evaporates, a fine dry particle remains, so we have a concentrate of far less bulk and even greater usefulness.

Today this transformation occurs instantly as the spray is injected into a blast of hot air. The water becomes water vapor as it is absorbed by the drying air which is cooled instantly far below its initial temperature. So, the cooler current of air bears along the fine particles of solids until they are separated from it, then collected.

In other words, in modern equipment the whole process from fluid solution to the dry particle takes only a few seconds. The rapid drying is one of the many advantages of spray drying progress, since the material being dried is exposed to the heat for so brief a period.

## **Automatic Operation**

Inasmuch as spray drying is now a continuous process, the entire cycle lends itself well to automatic opera-

Spray dried materials usually have free-flowing characteristics which, as every processing engineer knows, are a decided advantage in operations and applications on a commercial basis,

Greater simplification has been sought over the years in designing the modern spray dryer whether it be a small laboratory unit or great, high tonnage unit which in some instances have been built as large as a seven story building.

The drying medium in most units is a mixture of air

with 2 or 3% combustion products.

The most common heating element is a direct fired type furnace, burning either fuel oil or natural gas. Hot furnace gases are reduced to desired inlet temperature by dilution with atmosphere. Indirect heaters are customarily used where materials being dried will not tolerate the CO2 resulting from combustion.

Liquid to be fed for drying need only be fluid enough so that it can be delivered to the atomizing device.

#### Atomization

In connection with atomization, the fluid is converted into a fine mist either by a rotating disc or by a high pressure pump and nozzle. In the case of centrifugal atomization, the atomizing disc is driven by a spray machine with a water cooled motor capable of speeds ranging up to 25,000 r.p.m. The feed flows by gravity or moderate pressure through a pipe in the water cooled housing and then in a tubular stream on to the spinning disc attached to the motor shaft. Here it is accelerated into a thin sheet of liquid. The edge of the disc is moving at speeds ranging from 150 to 450 miles per hour.

In the case of nozzle atomization a pump forces the liquid through a fine hole in the nozzle at high pressure which is suddenly released as the fine stream leaves the tip, breaking the feed into fine droplets. The pent-up energy in the stream "explodes" it into fine, foggy, mist.

The size of the dry particles is determined by the size

of the droplets. This and other physical characteristics such as bulk density and moisture content are subject to a certain degree of control.

Drying action occurs in the spray dryer chamber. Hot drying air enters the top of the chamber at center, in a swirling, downward blast into which the mist is injected. With most materials there is instant conversion of the liquid drops into dry particles (dehydration). In some cases, however, where dessication of the moist particles takes more time, slower evaporation is necessary. As a rule engineering to particular products is required.

When the product is in fine powder form, dry and floating in currents of drying air the next step is to get it into the package. In some cases the greater part of the residue or product may be drawn off directly from the bottom of the drying chamber through a retary valve. The floating material is removed by a collector.

Ralph T. Reeve, president, Bowen Engineering, Inc.,

pioneers in the field of spray drying states:

'A general recognition of the advantages of spray drying has taken place only since the last war. Although the original spray drying patents were issued nearly a hundred years ago, spray dryers were for years considered novel with limited application. Spray drying was tried only when other methods of drying had failed.

"Today, however, spray drying is accepted as a method of primary importance. Among its recognized advan-

tages are:

(1) the handling of heat sensitive materials at a comparatively low cost;

(2) the production of physical characteristics in the final product which greatly augments its sales value;

(3) the almost automatic nature of its operation requiring minimum labor costs;

(4) the flexibility of operation and ability to change product characteristics to meet change in market conditions:

(5) the increasing consciousness that it costs money

to transport water and

(6) the long life and relatively low maintenance cost of a spray dryer. All of these factors and many others are responsible for the greatly increased interest in

"In addition, substantial improvement in equipment design has carried the application of spray drying into an ever increasing number of materials and industries. The use of spray drying as a unit of process equipment is still in its infancy. It has been extremely interesting to note that once a company has purchased its first spray dryer, perhaps after considerable study, the addition of subsequent units for other products almost sell them-

Among the advantages of modern spray drying is the fact that it is a continuous process which eliminates the costly start-up and shut-down operations encountered in batch type drying. The result is that spray drying often becomes the most economical operation on an

around-the-clock basis.

Many companies using or producing a variety of liquid materials subject to concentration are using the laboratory type spray drying unit on plant property in order to make tests and corrections of new materials and old. Already laboratory tests have been made on hundreds of materials with success in the great majority of instances.

## OWENS-ILLINOIS ASSURES YOU A



Co-ordinated Research

Pure research into formulae and fabrication of glass, packaging research into processing and handling methods in customer plants, and market research into consumer attitudes, add up to greater specific value for your packaging dollar.



**Engineered Design** 

The package that takes your product to market must take *three* needs into account. Considerations of its function in the retail store, its operating efficiency and its consumer utility all become a part of the prescription for an Owens-Illinois package.



The Right Container

Versatility of facilities and talents points to Owens-Illinois as your best source of supply for a wide range of specialized needs: containers where beauty, utility and tradition are blended in the proportions required by different product classifications.

# Containers with Beauty...



## COMPLETE PACKAGING APPROACH



The Right Closure

Know-how as to the best available liner and closure-best for packing, displaying, or using a specific product -may well be one of the most important single points through which expert packaging counsel will reward you many times over.



**Needed Fitments** 

With emphasis on the word "needed," Owens-Illinois specialists are keenly aware of sales benefits possible through use of plastic shaker and pour-out fitments which are not gadgets" but which increase consumer satisfaction with your product.



**Merchandising Cartons** 

Modern cartons are developed only through systematic consideration of their opportunity to serve you in the retail store and retail warehouse as well as on your own filling line and in transit. Owens-Illinois is pioneering such developments.

# for Beauty's Products



## Win customers for your product with the grace of a Duraglas salespackage

First step in a sale is to catch the customer's eye-to express the quality and personality of your product through its package.

To help you do that, Owens-Illinois will provide a package designed to stimulate sales . . . a package engineered to protect your product, make

it convenient to use-and thereby build repeat sales.

So with Owens-Illinois you have a marketing-minded supplier ready to provide complete packaging serviceglass containers of all types, capacities and designs, metal and plastic closures, merchandising cartons.

**DURAGLAS CONTAINERS** AN PRODUCT

OWENS-ILLINOIS

GENERAL OFFICES . TOLEDO 1, OHIO









#### 1. HELENA RUBINSTEIN

Helena Rubinstein has introduced a new preparation, "Skin Dew." A delicate pink liquid cream, the product is a moisturizing emulsion containing fermented milk proteins, which are said to protect the acid mantle of the skin. The cream is also antiseptic, and destroys bacteria. The cost is \$3 for 2 ounces; \$5 for 4 ounces; and \$8.50 for 8 ounces, plus tax.

#### 2. DELTAH PERFUMES

Deltah Perfumes, Inc. offers its scents—Midnight Hour, Gardenia and Chypre—in attractive jewel-shape bottles packaged in color set-up boxes. The prices of the perfumes are \$5.50 for  $\frac{1}{2}$  ounce; \$9.75 for 1 ounce; and \$18.50 for 2 ounces.

### 3. TUSSY

Tussy's new Spray-Mist Concentrates in plastic-coated aerosol bottles are available in Bright Secret and Midnight fragrances. The bottles are said to be leak resistant and to dispense a gentle even spray. The Bright Secret fragrance comes in a pink bottle with a crimson metal cap and a crimson and gold foil label; the Midnight odor is presented in light blue with a gold-colored cap and blue and gold foil label. Two ounces of the former sell for \$2, while the same amount of the latter costs \$1.75.

## 4. LADY ESTHER

An offer recently made by Lady Esther is the first free gift promotion in the history of the company. A 69¢ jar of hormone cream is given free with the purchase of the 89¢ 4-Purpose Face Cream. The two are attractively packaged together as a unit. The offer will run through May 31.

## 5. ROGER & GALLET

Cologne Shower is packaged by Roger & Gallet in a heart-shaped bottle. The presentation features a black and white







front label and slim white cap. The four fragrances are offered in corresponding colors: Blue Carnation is blue; Violette de Parme is violet; Le Jade is jade green; and Naturelle is clear.

#### 6. PRINCE MATCHABELLI

Prince Matchabelli, Inc. presents Perfume Preview, four  $\frac{1}{2}$  dram crowns of perfume in four fragrances: Wind Song; Stradivari; Beloved; and a newcomer, billed as an added attraction. The packaging theme is theatrical: a pair of tickets, opera glasses, white gloves and flowers are in color on the cover. The stage setting inside the box displays the bottles. Price of admission is \$2, plus tax.

## 7. EVYAN

Evyan packages its fragrances in two Trio combinations. The White Shoulders Trio consists of a flagonet of the perfume with Most Precious and Golden Shadows colognes in heart-shaped bottles. The Most Precious Trio is composed of the perfume with White Shoulders and Golden Shadows colognes. Each package is \$5 plus tax.

## 8. RICHARD HUDNUT

The April 15 offering from DuBarry is a new make-up color, Pink Fire, Promotion includes advertising in leading consumer magazines during May and June. In connection with the color DuBarry is introducing Flatter-Glo, a fluid make-up foundation.

#### 9. SHULTON

To promote its Desert Flower cream deodorant, Shulton, Inc. is making an introductory half price special. From May 14 to June 30 the \$1 size jar will retail for  $50\phi$ . Scented with Desert Flower, the product is packaged in a 2 ounce white sculptured jar with pink cap. The four container carton, designed for pyramidal displays, folds into a handy takehome box.



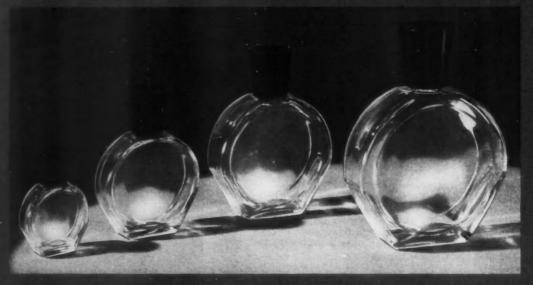




# Presentine the NEW

with the new FUTURA CAP, shown in black—also comes in brilliant GOLD—CÔTE... bright touches of elegance for the purse or boudoir.







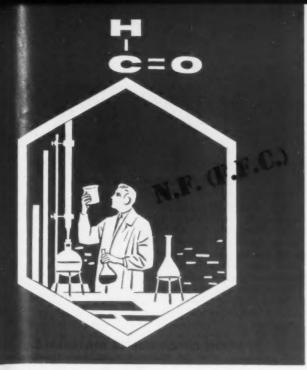
Spallprovik are the magic perfunie conairers that have funched millions of sales tips—diel—customer appeal and proved in 1 dram,  $\frac{1}{2}$  oz., 1 oz., and 2 oz. sizes.

Three-plane bases that lead to new packaging ideas. Note how gracefully the 2 on size pairs with the 1 dram bonde — ideal for a perfume coloune pockage.

Write now for samples and prices



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## OTHER HEYDEN INTERMEDIATES

- o-Chlorobenzaldehyde
- p-Chlorobenzaldehyde
- o-Chlorobenzoic Acid
- p-Chlorobenzoic Acid
- 2.4-Dichlorobenzoic Acid
- 3.4-Dichlorobenzoic Acid



## HEYDEN BENZALDEHYDE

a versatile intermediate for dyes, pharmaceuticals, chemicals, essential oils... and YOUR NEW PRODUCT!

Some of the applications for Benzaldehyde, such as in flavors and odorants, depend on the physical properties of volatility, odor and taste. Other uses—for instance, in the synthesis of dyes and drugs—are based on its chemical reactivity.

Which of these properties—physical or chemical—are of interest in the development of your new product? Heyden, the leading manufacturer of Benzaldehyde, offers two grades designed for various uses. The unsurpassed purity of Heyden Benzaldehyde N.F. (F.F.C.) makes it the preferred product for the formulation of cosmetics, odorants and flavoring agents. For use in organic syntheses, Heyden Benzaldehyde Technical can be depended upon for high quality and uniformity.

The Heyden sales office nearest you will welcome the opportunity to discuss your requirements, or see that you receive samples and technical information.



# SELECTED

## for Perfume, Cosmetic, Soap and Flavor Chemists

## **BOOKLIST**

#### 1. THE HANDBOOK OF SOLVENTS.

By Leopold Scheflan and Morris Jacobs. The most useful reference work on solvents available today. The properties, uses, action and technology of solvents are covered in this comprehensive handbook. Two major sections: 1. Covers theoretical aspects and practical attributes of solvents such as solvent action, solvent power, evaporation and evaporation rates and limits of inflammability. Discusses in detail solvent recovery, stresses safe practices; 2. The physical constants of over 2,700 liquid compounds are tabulated. Arrangement such that you can compare, at a glance, the so-called literature constants with the commercial constants of each solvent. 728 pp., 7 x 10, 17 illus. \$10.25 post-paid.

#### 2. SOAPS AND DETERGENTS.

By E. G. Thomssen, Ph.D. and J. W. McCutcheon, M.A., D.C.I.C. A volume for the practical soap maker. Synthetic detergents thoroughly discussed. Tabulates 250 surface active agents, their classification, trade names, manufacturers and application in the soap industry. Covers continuous soap making processes, soap perfuming and coloring, equipment, processes and methods. Up-to-date, authoritative. 511 pp., 66 illus. \$9.25 postpaid.

## 3. THE FUNDAMENTALS OF DETERGENCY.

By William W. Niven, Jr., Research Chemist & Consultant, Midwest Research Institute. A thorough-going treatment of the theory and practical applications of detergency. Discusses: 1. The effects of composition, concentration, temperature and added electrolytes on the nature and properties of aqueous detergent solutions; 2. The fundamental actions which constitute detergency and the role of detergents in aiding these actions; 3. The means of utilizing the various fundamental detergent actions in laundering (a typical application). 260 pp., illustrated. \$6.75 postpaid.

## 4. MANUAL FOR THE ESSENCE INDUSTRY.

By Erich Walter, Comprises modern methods with formulas for making all kinds of essences for liquors and alcoholic drinks, fruit juices and jams, mineral waters, essences of fruits and other vegetable raw materials, essences for confectionery and pastry. Describes raw materials and laboratory practice. Discusses taste and the transfer of flavor to foods and beverages. A standard work for many years. Contains 427 pages, 37 illustrations. \$8.25 postpaid.

## 5. PERFUMERY SYNTHETICS AND ISOLATES.

By Paul Z. Bedoukian, Ph.D. This carefully compiled volume supplies a genuinely felt want for authoritative data on perfumery synthetics. The work contains the history, chemistry, physical and chemical properties, manufacture, uses, and other pertinent data of the principal perfumery compounds; and covers the important perfumery synthetics. A complete index adds to the value of this useful book. 488 pages, \$8.75 postpaid.

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## 6. HANDBOOK OF CHEMISTRY AND PHYSICS.

Edited by Charles D. Hodgman, M. S. This authoritative reference book of chemical and physical data is literally a library in one volume. New isotopes are to be found in the table of isotopes. New atomic tables are given. Other revised contents include thermal neutron cross sections, miscibility of industrial solvent pairs, values of thermodynamic properties, organic analytical reagents, atomic weights and periodic arrangement of the elements. The wealth of data found in previous editions are brought fully up to date. 3000 pages, 5x71/2 in., India paper, imitation leather covers. \$8.50 postpaid.

## 7. HANDBOOK OF COSMETIC MATERIALS.

Their properties, Uses, and Toxic and Dermatologic Actions. By Leon Greenburg & David Lester. With a chapter on The Skin by Howard W. Haggard. Contains alphabetical listing, with frequent cross references, of information on approximately 1,000 substances. For each compound gives: Formula (including collateral names); Properties; Uses, Toxic Action; Dermatologic action. Exhaustive bibliography. Essential for Manufacturing Chemists, Cosmetic Industry, Chemical Specialties Industry, Dermatologists, Allergists, Industrial Hygenists. Published 1954. 467 pp. \$12.75 postpaid.

## 8. MODERN COSMETICOLOGY.

By Ralph G. Harry. Partial contents: Emulsions, Cleansing Creams, Milks and Lotions, Acid Creams, Face Packs and Masks, Mud Creams, Vanishing Creams, Powder Creams, Lubricating Creams, Astringents and Skin Tonics. Lipstick, Make-up. Face Powders. Sunburn and Suntan Preparations. Deodorants. Depilatories. Antioxidants. Bath Preparations. Bath Oils and Emulsions. Foam Baths, Hand Creams and Lotions, Dental Preparations. Mouthwashes. Shaving Preparations. Hair Tonics and Lotions. Hair Creams and Fixatives. Permanent Waving Solutions. Hair Setting Lotions and Hair Lacquers. Hair Shampoos and Soapless Detergents. Manicure Preparations. Eye Lotions. Baby Preparations. Foot Preparations. Insect-Bite Preparations. Humectants. Acne Preparations. Coloring of Cosmetic and Toilet Preparations. 514 pp. \$12.25 postpaid.

#### 9. THE ESSENTIAL OILS.

By Ernest Guenther, Ph.D. This monumental six-volume work is comprehensive, authentic. VOL. I covers: Origin and Development of Essential Oil Industry, Chemistry and Function of Essential Oils in Plant Life, Products of Essential Oils. 448 pp., \$8.50 postpaid . . . VOL. II gives detailed data on several hundred of the more important constituents of essential oils. 852 pp. \$12.50 postpaid . . . VOL. III describes the oils of plant families Rutaceae (with special emphasis on citrus oils) and Labiate. 777 pp., \$12.50 postpaid . . . VOL. IV covers the individual oils in six plant families not covered in Vol. III. 752 pp., \$12.50 postpaid . . . VOL. V is of special importance to the flavor chemist. 507 pp., \$12.50 postpaid . . VOL. VI, the final volume, is of interest to the pharmaceutical, flavor, and perfume industries. Features wintergreen, sweet birch, valerian, mustard, onion, hops, etc. Also deals with pine oils and turpentine. Includes table showing the taxonomic classification of all the essential oils described in all six volumes. 481 pp., \$12.50 postpaid.

# News

## and Events

## Dr. Walter B. Shelley Wins \$1000 S. C. C. Special Award

Dr. Walter B. Shelley, associate professor of Dermatology at the University of Pennsylvania, will receive the second Special Award of \$1000 of the Society of Cosmetic Chemists at its May 18 meet-The Literature Review Committee selected Dr. Shelley from a field of 17 candidates, citing his research on apocrine and eccrine sweat glands. The honor goes to the author whose recent scientific papers offer the greatest potential value to cosmetic science. The Special Award Committee was headed by James H. Baker. The chairman of the Literature Review Committee was Dr. Paul G. I. Lauffer and the members of the commit-tee were: Gabriel Barnett; Dr. Irvin H. Blank, Harvard Medical School; Dr. Joseph Dusenbury, Textile Research Insti-tute; Dr. Joseph Kalish, Drug & Cosmetic Industry; Dr. David Pressman, Roswell' Park Memorial Institute; and Dr. Irwin B. Wilson, College of Physicians and Surgeons, Columbia University.

## TGA Will Discuss How to Get More of Consumer's Dollar

The business program of the annual convention of the Toilet Goods Assn., May 15-17, at the Waldorf-Astoria Hotel in New York City will deal chiefly with the problem of how the toilet goods industry can secure a larger share of the consumer's dollar during 1956, according to Robert E. Schwartz, executive vice-president, Wildroot Company, Inc., chairman of the T.G.A. convention program committee.

Mr. Schwartz says that T.G.A. members may like or dislike to hear the facts which will be presented by competent speakers, depending on their personal evaluation of themselves and the companies which they represent, but that the program which will generally follow previous T.G.A. convention patterns will focus more sharply on spots where toilet goods people may be missing the boat.

An innovation this year will be a session devoted to executive problems arising out of packaging and production. Changes in this area of toilet goods manufacture have been revolutionary and in the past only the big companies have been able to put them completely into

practice. The result has been that small companies have been placed to some extent at a competitive disadvantage.



Robert E. Schwartz

Under the supervision of Ed Love, production manager of Bristol-Myers Co., an expert in the field of packaging and production, an entire session of the convention will be devoted to efforts to minimize the small company's disadvantage. The importance of packaging design to sales and reduction of costs through automatic and semi-automatic equipment along with the latest advances in plastics and other packaging material will be fully presented so that all members of the industry may take advantage of these developments.

A second session covering management and selling problems is under the direction of Albert E. Ritchie, vice-president in charge of sales for the Wildroot Co.

Other subjects to be covered in the session are the application of automation to small businesses and a discussion of profitable markets still untapped by larger companies.

John H. Breck, Jr., executive vicepresident of John H. Breck, Inc., will direct the session on advertising, generally on the subject of helping the smaller manufacturer. "How to get into television without excessive costs," "How radio can be a better buy than before," "Why in this T.V. age, magazines and newspapers are more important than ever," will all be discussed.

The final day of the convention will be as usual devoted to a meeting of the Scientific Section under the direction of Dr. Dan Dahle, chairman of the section.

## Excellent Program for Society of Cosmetic Chemists Meeting

An excellent program of technical papers has been arranged for the May 18 Spring meeting of the Society of Cosmetic Chemists in the Hotel Commodore, New York.

At the luncheon honorary membership will be conferred on Commissioner George P. Larrick of the Food & Drug Administration, and Dr. Walter B. Shelley of the University of Pennsylvania will receive the Special Award of \$1000. President George G. Kolar will preside at the luncheon and will present the scroll of honorary membership to Commissioner Larrick. Sabbat J. Strianse, president-elect, will present the special award to Dr. Shelley. Dr. Frederick D. Wideman, emeritus professor of dermatology of the Graduate School of Medicine of the University of Pennsylvania, will describe Dr. Shelley's achievements.

The papers to be presented at the meeting were arranged by a committee of which Ross C. Whitman was chairman. Walter Wynne is chairman of the committee handling arrangements.

Papers to be presented at the meeting

"The Behavior of Perfume Materials in Thioglycolate Solutions" — Edward Sagarin and Marvin Balsam

"The Measurement of Static Charge on Hair"—Dr. H. Henkin, Dr. V. C. Ester, Miss C. Mills

"A New Permanent Waving Process"

—Raymond E. Reed

"The Use of Iodophors in Cosmetics"

—Dr. Abraham Cantor, Dr. Sylvia Most,
Dr. Morris Shelanski

"The Analysis of Lipsticks"—Dr. Paul W. Jewel

"Laboratory Evaluation of Potential Caries-Preventive Agents in Dentifrices" —S. D. Gershon, O. W. Neiditch, D. J. Martin

"Some Practical Problems in the Formulation of Aerosol Hair Sprays"—H. R. Shepherd

## The Fragrance Foundation To Hold Luncheon Meeting

The Fragrance Foundation, Inc., will hold a luncheon on April 24 at the Hotel Plaza, New York City, for members of the Foundation and their guests.

The program will include a report on recent activities of the Foundation with a speech given by Elwood A. Whitney, a vice president and director of Foote, Cone & Belding advertising agency.

A reception will begin at 12::00 moon and luncheon will be served at 12:30. Reservations may be made through The Fragrance Foundation offices, 1 East 53rd St., New York 22, N. Y.

## Commerce Clearing House Has New Address

The Commerce Clearing House, Inc. has moved to new quarters at 4025 W. Peterson Ave., Chicago 30, Ill. The telephone number is COrnelia 7-9010.

## Cosmetic Firms Receive Packaging Achievement Awards







Gold and silver awards for outstanding achievement in packaging have been presented by Variety Store Merchandiser in its annual competition to twenty-one firms classified into seven merchandise divisions. In the cosmetics and toilet goods classification the winners were: Gold Award, Andrew Jergens Co. for its Jergens Lotion "tear drop" package; Silver Award, Procter & Gamble for its Crest tooth paste container; and Silver

Award, Hazel Bishop Co. for its Hazel Bishop Compact Make-Up design.

The judges, who selected the award-winning packages, were: C. R. Trethaway of F. W. Woolworth Co.; H. E. Mertin of S. S. Kresge Co.; L. C. Shockley of McCrory Stores Corp.; N. L. Jones of S. H. Kress Co.; J. H. Frick of J. J. Newberry Co.; and J. Gordon Lippincott of Lippincott & Margulies, Industrial Designers.

## TGA Reports 1955 Sales Highest on Record

Sales of toilet goods, which includes all preparations with the exception of toilet soaps, reached a total of \$1,192,-200,000 in 1955, according to The Toilet Goods Assn. This represents the very considerable increase of 9.7% over the total for 1954 which was the previous high record.

A very substantial gain of more than 8% in sales of dentifrices was perhaps the feature of the year. Practically all this gain took place in food stores. Sales in both drug and variety stores of dentifrices were lower than the previous year. Another group which showed a very sharp gain of approximately 11% was shaving creams. In this category sales through food stores were more than 20% higher than they were in the previous year. Undoubtedly, the reason for the great increase in shaving cream dollar volume was the increase in popularity of the aerosol creams which are considerably higher in cost per shave than either the lather or brushless creams. Another group which showed a continuing increase was the aerosol hair sprays, but the remainder of the group of hair products which have been increasing sensationally over the last several years, did not keep up with the previous percentage of increase.

Fragrance products in general showed sales at approximately the 1954 rate. There was, however, a significant increase in sales of lipsticks which was reflected as well in somewhat increased sales of make-up products as a whole. The single exception to this was loose face powder which again declined in sales volume.

Every type of outlet showed a gain in total sales, but percentage-wise, food stores and house-to-house sales showed the greatest increase. Business in chain and independent drug stores dropped below 30% of total volume for the first time. Department stores and specialty shops continued to hold a little more than 22% of total volume. The increase in sales in food stores continued but it was largely traceable to business in proprietary toilet goods such as toothpaste, shaving creams, hair tonics and shampoos. Efforts to expand the list of products sold in food stores did not meet with conspicuous success. The rate of increase through food outlets was somewhat lower than it had been in previous years and the same was true in the case of house-tohouse sales which improved their per-centage to a flat 20% but did not increase as rapidly as in 1954 and 1953.

Business in chain and independent drug stores was up 6% from 1954; department stores and specialty shops up 8%; food stores up 13%; house-to-house up approximately 11½%.

## Grace Kelly Wedding Gets Radio Sponsors

Coverage of the Grace Kelly-Prince Rainier III wedding on CBS radio is being sponsored by four firms.

On April 16 Lettuce, Inc. will sponsor the half-hour broadcast devoted to onthe-spot descriptions of the parade, private parties and civic celebrations.

The April 17 program, devoted to interviews with the heads state and civic and religious leaders, will be sponsored by Purex Corp., Ltd., for Purex bleach and Old Dutch Cleanser, and the lettuce company.

On April 18 Lanvin Parfums, Inc. will share the tab with Lettuce Inc., for a broadcast report of the civil wedding ceremony and the garden party scheduled to follow.

And on April 19 Lanvin and Coty, Inc. will co-sponsor the coverage of the religious ceremony, including the wedding vows and the wedding breakfast.

All programs are to be broadcast at 12:45-1:15 p.m. EST.

## Note Rise in Collapsible Metal Tubes for Toiletries

January shipments of collapsible metal tubes for toiletries were 15.7 per cent higher than in the same month in 1955, the Collapsible Tube Manufacturers Council reports.

A sharp increase in the use of fold-up tubes for dentifrices and medicinal and pharmaceutical products, said Lester B. Platt, executive secretary, made January shipments the highest for this month in the industry's history.

Shipments totaled 99,673,632 units with those for toiletries—dentifrices, medicinals and pharmaceuticals, cosmetics and shaving creams—accounting for about 85 per cent of this amount.

It was the fifth successive month that individual monthly records have been set with December, 1955 shipments reaching an all-time peak of 104,518,512 units.

Sixteen manufacturers with 20 plants in 11 states make up the metal tube industry.

## European Chemists Attend Carl Neuberg Medal Meeting

The American Society of European Chemists and Pharmacists held the Carl Neuberg Medal Meeting on April 12 at the New York Academy of Sciences in New York City. F. F. Nord, president of the society, presided.

the society, presided.

Van R. Potter of the University of Wisconsin made a talk on "The Achievements of the Medalist," and Carl Neuberg, chairman of the award committee, made the presentation of the 1956 Carl Neuberg Medal. The medalist, Henry R. Lardy of the University of Wisconsin, gave the medal address on "The Thyroid Gland—Pandora's Box."

A reception in honor of the medalist followed the meeting.

## Impressive Program for F.E.M.A. Meeting May 13-16

Atlantic City will again play host to the 47th annual convention of the Flavoring Extract Manufacturers' Assn. of the United States on May 13 to 16 at the Hotel Traymore.

The Board of Governors of the F.E.M.A., at its last meeting in Chicago, approved a business program that is one of the most impressive ever planned. An excellent and well diversified program of speakers has been arranged and no one of the key speakers should be missed.

Dr. Robert A. Osborne, Chief of Beverage Inspection Division, Food and Drug Administration, has prepared a talk of vital interest to all members of the association.

Dr. C. O. Willits of the U. S. Department of Agriculture, Agricultural Research Service, will also be one of the featured speakers. He will discuss the important progress which has been made in maple research.

Other talks important to extract manufacturers will be "The Vanilla Bean Market" by Ray Schlotterer of the Vanilla Bean Assn. of America; the annual report of John Hall, executive secretary and general counsel of the F.E.M.A.; Report of the Scientific Research Committee by Dr. A. S. Wendt; Report on Vanilla Research by Dr. George McNew of the Boyce Thompson Institute, followed by a question and answer period, Dr. Edward Prill presiding. There will be a report covering vanilla publicity by Barney Lewis; report of the Food Additive Committee by Harold Janovsky; and interesting talks covering Spray-Dried Flavors by J. M. Wenneis and Stabilization of Citrus Oils and Beverages by Dr. David Jorysch.

While the many fine speakers have been emphasized, sight should not be lost of the many entertainment features that have been planned. Starting Sunday afternoon, May 13, there will be the Suppliers Hospitality Party; on Monday, following the business session, will be the convention luncheon, golf tournament at the Atlantic City Country Club, or boat ride for those who prefer it, followed by a delicious shore dinner at the famous Captain Starn's on the Inlet Yachting Pier, with choice of either lobster or steak. On Tuesday, the morning session will be followed by a pleasant association luncheon, and the afternoon session

by the President's reception and dinner-dance.

The Chemists' Breakfast will be the first order of business Wednesday morning. This will permit an informal discussion of various technical aspects of the extract business with special emphasis on the F.E.M.A. research program. This will be followed by a general session of the association.

This brief resume does not begin to do justice to the exceptionally fine, well rounded program which has been arranged for this year's attending members.

In order to provide the very best entertainment and accommodations, it has been necessary to increase the registration fee from \$35 to \$40 per person. For the past several years, costs have been steadily mounting and have now reached the level where it has been necessary to effect this increase so that the convention will be at its usual high standard.

The Convention Committee, Robert Krone, chairman, Fritzsche Brothers, Inc.; Charles P. McCormick, Jr., McCormick & Co.; William X. Clark, Sterwin Chemicals, Inc. and Frank Green of National Aniline Division, Allied Chemical & Dye Corp., are looking forward to meeting all members at Atlantic City in person at this convention. Hotel reservations for the convention period may be made directly with the Hotel Traymore.

## No Promotion of Grace Kelly Wedding

An advertisement which ran in Women's Wear Daily and Daily News Record warned manufacturers and retailers throughout the country to refrain from the use of the names Grace Kelly, Prince Ranier III, or their seals, in any manner without permission of John Edward Sheridan, an attorney who represents them. Vigorous prosecution is promised for offenders.

It was reported that the Kelly family had been getting numerous requests for permission to use the names and the Monaco seal, and that all had been turned down with the exception of one. Volupte of New York has been granted the right to market a jewelry set with the Monaco crest, with all profits on the item going to Women's Medical College Hospital of Philadelphia.

## MIT to Hold Program On Biology Research

Modern research methods in biology and medicine will be the subject of a two-week program at the Massachusetts Institute of Technology, from July 9 through July 20.

## New York Chapter of S. C. C. Learns Much About Color

Francis Lewis Wurzburg, Jr., manager of the Product Application Engineering Dept. of the Interchemical Corp., was the speaker at the March 28 meeting of the New York Chapter of the Society of Cosmetic Chemists.

As Mr. Wurzburg is a physicist of broad experience in color and colorimetry and has written numerous authoritative papers in these fields, and as he is a member of the Optical Society of America, the Photographic Society, and the Society of Motion Picture and Television Engineers, and was formerly manager of the Interchemical Corp.'s precision color

of Motion Picture and Television Engineers, and was formerly manager of the Interchemical Corp.'s precision color laboratory, he was well equipped to give a highly informative and interesting talk on color control, with particular reference to its applications in packaging.

He described briefly the physical

phenomena of color, instrumental means for its measurement and description and the physiological mechanism of color perception. He stated that at present the best instrumental methods and the human eye are about equally sensitive in color discrimination. He mentioned the phenomenon of metamerism whereby two shades may appear identical under one light and quite different under another, and gave a physical explanation of this effect. The talk concluded with a brief discussion of the problems of establishing and recording permanent color standards. The lecture was illustrated with color slides. A lively question and answer discussion period followed the lecture.

## Francis H. McAdoo, Jr. Is Warner-Lambert Vice President

Francis H. McAdoo, Jr., president of the Emerson Drug Co. of Baltimore City, has been named vice president and a director of Warner-Lambert Pharmaceutical Co.

The merger of Emerson with Warner-Lambert was approved by stockholders of both concerns and became effective on April 12.

## Replacements for Orange Flower Products by Roure-Dupont, Inc.

The failure of the orange flower crops in southern Europe and northern Italy will have its repercussions, especially on neroli and absolute orange oil. Roure-Bertrand Fils & Justin Dupont of France, parent company of Roure-Dupont, New York, have devoted research to overcome such an emergency and call attention to neroli and orange specialties: neroli petales at \$40; neroli 1956 at \$30; neroli 256 at \$25; fleur d'oranger synthetique 1908 at \$25; and fleur d'oranger synthetique at \$20.

## "Lively Flavors" from Felton Chemical Co.

The Felton Chemical Co. has published a catalog, "Lively Flavors," which lists and describes its many flavor products.



Commercials adjacent to the coverage of the Grace Kelly-Prince Rainier III wedding festivities by the NBC radio program Weekday are arranged for Bourjois, Inc. Seated, left to right: Virginia Graham, Weekday hostess; Paul Gumbinner, of the Lawrence C. Gumbinner Advertising Agency; Fred Horton, NBC manager of radio network sales. Standing, left to right: Mike Wallace, Weekday host; Louis Botham, president of Bourjois, Inc.; and Mitch Benson.

## FEMA Announces Program For 47th Annual Convention

The program for the 47th Annual Convention of the Flavoring Extract Manufacturers' Assn., to be held at the Hotel Traymore in Atlantic City, N. J., May 13-16, has been announced. It is as follows:

May 13: Registration; Board of Gov-

May 13: Registration; Board of Governors luncheon and quarterly meeting; Suppliers Hospitality party.

May 14: Registration; General session, with

Invocation

Report of Convention committees President's annual address, by Don C.

Jenks
"The Vanilla Bean Market," by Ray
Schlotterer, secretary of the Vanille Bean

Schlotterer, secretary of the Vanilla Bean Assn.

Report of Executive Secretary and General Counsel

Appointment of committees

Luncheon, annual golf tournament, boat ride and dinner.

May 15: General session, with

Report of Scientific Research Committee

"Report on Vanilla Research Program," by Dr. George L. McNew, Boyce Thompson Institute for Plant Research, Inc.

Question and answer period on the vanilla research program being conducted by Boyce-Thompson Institute for Plant Research. Inc.

"Vanilla Publicity Program," by Bernard Lewis of Bernard L. Lewis Inc.

nard Lewis of Bernard L. Lewis, Inc. "Vanilla Percolation," by Dr. Richard Hall, McCormick & Co., Inc.

Luncheon

Report of Food Additives committee, by H. L. Janovsky, chairman "Spray Dried Flavors," by J. M. Wen-

"Spray Dried Flavors," by J. M. Wenneis, Norda Essential Oil and Chemical Co.

"Stabilization of Citrus Oils in Bev-

erages," by David Jorysch, H. Kohnstamm & Co.

"The Composition of Maple," by Dr. C. O. Willits, U. S. Dept of Agriculture President's reception, and banquet-dance.

May 16: Chemists breakfast; General session with

Report of Membership committee by S. M. Kleinschmidt, chairman

Treasurer's report by Lloyd E. Smith Report of Advertising committee by C. P. McCormick, Jr., chairman

Report of Standards committee by E. N. Heinz, Jr., chairman

Report of Alcohol Tax committee by Hunt P. Wilson, chairman

Report of Special Committee on Amendments to By-Laws by M. J. Hess, chairman

Report of Auditing committee Report of Resolutions committee Unfinished and new business

Report of Nominating committee by J. N. Curlett, chairman Election of officers

Adjournment of 47th annual convention.

## William R. Farrell Addresses ADACIOM

William R. Farrell, director of advertising, Monsanto Chemical Co., addressed the Associated Drug and Chemical Industries of Missouri at its regular monthly meeting on April 11.

## Chemical Sales Clinic

The fifth annual Chemical Sales Clinic, sponsored by the Salesmen's Assn. of the American Chemical Society, will be held on October 15 in New York.

## Plane Grounded; No Speaker for Cosmetic Career Women

Wallace Werble, who compiles Food, Drug and Cosmetic Reports, scheduled to address the April 4 meeting of the Cosmetic Career Women in the Waldorf-Astoria Hotel, failed to appear. The late morning plane which he depended upon to take him from Washington to New York was grounded on account of fog.

As about 300 men and women had gathered in the Starlight roof of the Waldorf-Astoria for his talk, Stephen Mayham, executive vice president of the Toilet Goods Assn. stepped into the breach and made a splendid if brief address, at the conclusion of the luncheon. Miss Katherine Fitzpatrick presided at the meeting.

## Neroli Substitutes Offered by Felton Chemical Co.

Following news that the severe frosts of the past Winter have seriously affected the crop of fragrant orange blossoms, source of neroli bigarade and fleur d'oranger absolute, both of which are valuable raw materials for the creative perfumer, Felton Chemical Co. has called attention to two specialties—Nerolyol 632 and fleur d'oranger alternate 7 which are priced at \$25 per pound.

## Yardley Is Granted Fair Trade Injunction

Yardley of London, Inc. has been granted a permanent injunction which restrains River Sales, Inc. from advertising, offering for sale, or selling at retail any Yardley products below fair trade prices. River Sales operates cosmetic concessions in a number of J. M. Fields department stores.

## Shulton Sponsors Father's Day Window Contest

Shulton, Inc., manufacturers of Old Spice shaving and grooming products, will sponsor a Father's Day window contest for retailers. Thirty cash prizes, totaling \$6,075, will be awarded to department and drug stores submitting the most original and imaginative window displays which use the theme, "Keep Dad Ship-shape—Give him Old Spice."

## California Exempts Fluoride Dentifrices from Poison Law

A recent ruling by the California State Board of Pharmacy exempts dentifrices which contain 0.1% or less fluoride ions, and mouthwashes which contain 0.2% or less fluoride ions from the provisions of the California Poison Act.

## W. F. Zimmerman Dies at Age of 62

William F. Zimmerman, head of the company bearing his name, died from cancer on April 8. A graduate of Northwestern University, he was with Helfrich Laboratories for years. Two daughters survive him.

## Supermarket Competition Threat to Established Brands

The growing intensive price war between supermarkets carries with it the greatest threat to national brands according to M. M. Zimmerman in an address before the Merchandising Executives Club of Chicago.

The supermarket operator is deeply concerned how he can wage a successful battle against his competitors in a price war that is getting more serious every day. It may end in a war where the person who can afford to lose the most money will be the one to survive.

Two results of this competition would be: (1) an acceleration of the merger trend among retailers and (2) a vast increase in private label brands, on the part of store operators. The food merchant's salvation may be the private label where he can control the profit to his satisfaction.

Mr. Zimmerman proposed these questions which the advertiser must answer to the store operators' satisfaction "if he is not to suffer as much as a 30% sales decrease" in the coming private vs. national brand struggle:

1. "Is there, in fact, any economic justification for your brand vs. the private brand? Not just that mass production is cheaper; in many cases, it is not."

2. "Beyond the obvious fact that advertising costs you less when you adver-

tise nationally, what does this advertising do for the retailer?'

3. "Have you told what you have done, manufacturing-wise, over the years to make your product better or cheaper?"

4. "Can your salesman demonstrate

to the retailer that your national adver-tising is building his store a customer?" 5. "Can you demonstrate that your brand gives him the same or better merchandising flexibility that he gets from the private brand?"

## More Floor Space for **Packaging Exposition**

Additional floor space is available for exhibits in the Sixth Western Packaging & Materials Handling Exposition which is scheduled for the Pan Pacific Auditorium in Los Angeles, July 10-12. Original exhibit space was sold out by Jan-

## Ar. Winarick Purchases Schnefel Bros. Corp.

Schnefel Bros. Corp., manufacturer of LaCross manicure products, has been purchased by Ar. Winarick Inc., to complement its own line of manicure and other products. These include Dura Gloss nail polish, Dr. Ellis Wave Set and Jeris hair preparations.

## TGA Releases Information On Annual Golf Tournament

The sixth annual Toilet Goods Industry Golf tournament will be held on May 14 at the Winged Foot golf club, in Mamaroneck. The committee for the event is composed of Paul E. Forsman, chairman; Sydney A. Finer, Philip J. Heinle, John E. Gabrielsen, and James H. R. Stephenson.

It is announced that all tournament rounds must start not later than 1:30 p.m. The first time on the tee is a player's official tournament round. No pre-tourna-ment play will be permitted.

The trophies to be awarded are the Cecil Smith, B. M. Douglas, B. E. Levy, and the Maple Leaf. The first three trophies will be played for on a handicap basis by representatives of active and associate members of the T.G.A. A replica of each trophy is given to the winner. The original trophy remains at T.G.A. headquarters but is engraved with winner's name.

The Maple Leaf trophy has been donated by the Toilet Goods Manufacturers Assn. of Canada. The names of winners will be engraved on the Maple Leaf Trophy, which will be kept at T.G.A. headquarters in New York, and the winner will also receive a Hudson Bay blanket from the Canadian Assn.

Many other prizes for all members and their guests, regardless of handicap, will be awarded.





#### Benjamin Ansehl Cosmetics Emphasize Packaging



To give extra sales emphasis to its new line of perfume and men's products, the Benjamin Ansehl Co. of St. Louis has packaged it in distinctive containers which use gold metalized plastics as an integral part. Called "Golden Touch," the four fragrances of the perfumes are put into glass bottles which are then placed into gold miniatures of a coach, typewriter, clock and telephone.

The men's after shave and hair dress-ing are packaged in a "picture frame" bottle with a white reverse label. The gold finish on the bottle is produced in the Benjamin Ansehl plant by the company's own special process. The theme of the line, "Golden Knight," is developed in the label and cap. All of the bottles and ceramic lettering were done by W. Braun Co.

## **TGA Convention Announces** Scientific Section Program

The following program has been announced by the Toilet Goods Assn., Inc., for its scientific section, which will be held on May 17 as part of its annual convention:

The Chemistry of Lauric Acid—Die-thanolamine Condensation Products, by Harry Kroll, Geigy Chemical Corp.

Axillary Perspiration-Odors and Deodorization, by W. G. Fredell and R. R. Read, Lambert-Hudnut Division of Warner-Lambert Pharmaceutical Co. Inc.

The Sphere of Research, by Paul G. Lauffer, The George W. Luft Co. Inc.

The Physicochemical Characterization of Essential Oil Constituents and Their Derivatives by Modern Instrumentation Techniques, by Leo Levi and James L. Thomson, Food and Drug Laboratories, Dept. of National Health and Welfare, Ottawa, Canada and James C. Evans and Harold Bernstein, Pure Chemistry Division, National Research Council, Ottawa, Canada.

Problems in Dispensing Powders from Pressurized Containers, by Victor Di Giacomo, Givaudan-Delawanna, Inc.

Shampoos—A Practical Method of Evaluation, by W. G. Fredell and R. R. Read, Lambert-Hudnut Division of Warner-Lambert Pharmaceutical Co. Inc.

Toxicity Studies on Monoethanolamine Thioglycolate Cold Waving Lotions, by Ross Whitman and Martin G. Brookins, Rayette, Inc.

Azulene and Its Derivatives, by H. K.

Thomas, Ph.D. and H. G. Gribou, Ph.D., Research Dept. of Dragoco.

## **CCA's Operation Forward** Is Inaugurated

During its first meeting of the year in Hollywood, the California Cosmetic Assn. voted President Harry F. Taylor unequivocal approval for a program beamed toward expansion of the organization. With emphasis on ten major services made available to members, the association has its sights set on the ambitious goal of doubling its regular membership before the end of 1956. Gene Salee of Gene Salee, Inc. was chosen chairman of the committee which will coordinate the campaign for new mem-

Probability of achieving the goal was evidenced at a luncheon preceding the meeting, when four new members were officially welcomed into the association. They were Helaine Seager Cosmetics of California; Dolly Varden, Inc.; Onyx Oil & Chemical Co.; and Western Carload-

ing Co., Inc.

Other officers working with Mr. Taylor in effecting CCA's year-long program are vice presidents Lyle Christy and A. C. Schaefer; treasurer D. G. Edmonston; and associate group chairman Tom Sheffield.

A new emblem and membership certificate has been designed to replace those used by the organization since its inception twenty-five years ago.

## **No Planned Convention Entertainment for TGA**

The Toilet Goods Assn. has announced that the association itself will sponsor no entertainment features at its forthcoming convention. The program will consist solely of the business sessions and luncheons which have been successful in the past.

The association states that members should consider their own plans for entertainment completely free, but requests that entertaining suites remain closed during the business sessions and official luncheons.

## No Prescription Needed For Sodium Fluoride Dentifrices

An order exempting sodium fluoride dentifrices from requirements that they be sold on prescription only has been made final by the Food & Drug Admin-istration. The following standards must be met, however, in order to qualify for the exemption:

1. The sodium fluoride is prepared, with other components, in a dosage form suitable for household use as a dentifrice powder, and containing no drug limited to prescription sale under the provisions of section 503 (b) (1) of the

2. The sodium fluoride and all other components of the preparation meet their professed standards of identity, strength, quality and purity.

3. If the preparation is a new drug, an application pursuant to section 505 (b) of

the act is effective for it.

4. The preparation contains not more than 5 milligrams of sodium fluoride per gram and is packaged to contain not more than 300 milligrams of sodium fluoride per retail package.

5. The preparation is labeled with adequate directions for use only as a dentifrice by adults and children 6 years of age and over, and includes instructions to rinse the mouth thoroughly after

brushing the teeth.

6. The labeling bears, in juxtaposition with the directions for use, clear warning statements against: (a) Use by children under 6 years of age. (b) Use if the water supply contains fluoride, except as directed by a dentist.

## Roger & Gallet **Honors 30 Year Employees**

Guy Rocherolle, president of Roger & Gallet, recently presented to three employees the sterling silver medal traditionally given upon completion of thirty years of service. Those honored were Miss Anne Armstrong, Patrick Dwyer and Robert Imber.

The silver medal was originally designed in 1905 by A. Pillet, an outstanding exponent of engraving craftsmanship. It presents in bas-relief the winged cherub which is the company's trade mark. On the reverse of the medal is engraved the story of the presentation and the recipi-

ent's name and date.





A scented anti-perspirant powder for the feet called Fling is being market tested by the Blue Jay Products Div. of the Kendall Co. in Bakersfield and Fresno, Calif. and Tucson, Ariz.

Fruit flavored vitamin tablets called Viterra Tastitabs have been launched by Chas. Pfizer & Co. They are soluble, multi vitamin tablets which may be melted in the mouth, chewed or mixed with baby formulas and may be dissolved in water.

Expect non-store retailing especially by mail order and vending companies to maintain their substantial gains in suburban areas. The Department of Commerce shows increases between 1948 and 1956. Thus, Cleveland non-store suburban retailing was up 7,317% over 1948; San Francisco and Oakland suburbs jumped 1,247% in non-store retailing in the same period.

A young girl looks in the mirror 20 times daily according to a study by Coty Inc. As she grows older and other things besides her looks engage her attention, the number diminishes.

A new and improved quick home permanent is being introduced by Warner-Lambert Pharmaceutical Co.

Beauty tips for the bride-to-be are offered by Charles of the Ritz.

Chesebrough-Ponds Inc. has leased one and a half floors in the skyscraper being erected at 485 Lexington Ave., New York.

An all purpose cream, Aqua Lo, to serve as a shampoo, bubble bath and body and face cleanser, packed in a plastic bottle, is offered by Schieffelin & Co.

A new perfume bottled in France, Memoire Cherie, has been introduced in this country by Elizabeth Arden in a half ounce flacon for \$17.50.

A cream to relieve the pain of eyebrow tweezing has been launched by Kay Lee Co. The cream, an eyebrow pencil and a pair of tweezers are packed in a plastic kit retailing for \$2.95.

National Food, Drug & Cosmetic Law Week marking the fiftieth anniversary of the first federal law on foods and drugs will be celebrated June 24-July 1. Federal officials and companies in the trade will participate.

A more generous discount policy on Hudnut toiletries has been established by Hudnut Sales Co.

Dial Shampoo in a 7-oz. glass bottle, supplementing three sizes in polyethylene bottles, has been introduced by Armour & Co.

Sales of Warner-Lambert Pharmaceutical Co. in 1955 were \$90,037,399. The companies' world-wide sales including those of non-consolidated foreign subsidiaries approximated \$104,518,000.

The increased life span of today's workers is discussed in a bulletin issued by the Occupational Health Institute. The purpose is to bring better understanding of the significant problems raised by the growing army of aged workers and how the aging may find a pattern of useful life in industry.

The day is coming when men will touch up their faces with a bit of color make-up to make them look healthier according to William A. Poucher in an interview with H. D. Quigg published in the New York World-Telegram and Sun. Men are getting more conscious of their appearance. Already they use fragrance in hair lotions, after shave lotions, shaving cream and talc.

A male human scalp in full bloom contain 121,630 hairs Harold Hutchins reports in Lotions & Potions.

Of over 900 drug items introduced in 1953 only 50 are left Joseph Unger reports in Grey Matter.

Jules Montenier Inc. has been sold to the Helene Curtis Industries Inc. Employes' Profit Sharing Retirement Plan. In January the Kings Men line of men's toiletries was acquired by the company. The Plan has licensed Helene Curtis Industries to manufacture and distribute all of Montenier products. Dr. Montenier has joined Helene Curtis. The Montenier products include Stopette, Stopette stick deodorant and Poof, a deodorant body powder.

Yvonne Inc. must not use White Showers and Most Precious as trade names because they are confusingly similar to White Shoulders and Most Precious trade marks of Parfums Evyan.



MODEL 8 ESS – Excellent for filtration of perfumes, essential oils and other liquids. Made from stainles steel either cast or rolled stock, precision machined and highly polished. Easy to set-up, screens can be removed quickly and cleaning is simple and rapid.



MODEL EBW – This filter is recommended for small batches where filter aid is required. Design eliminates need for rubber washers... asbestos filter sheets form their own seal



PORTABLE VACUUM BOTTLE FILLER Will fill small or batch lots of material at lowest cost. Fills bottles to uniform height without loss of material. Various spouts for filling shaker-type bottles to gallons.

Write for Illustrated Catalog



## TGA Discontinues Employment Service

The Toilet Goods Assn. has announced that its employment service, instituted as an aid to returning veterans of World War II and the Korean War, has been terminated. It was felt that it was not a function of a trade association to operate such a service in competition with established employment agencies and others specializing in this work.

## Treasury Dept. Plans Importation Check Fee

A fee of \$100 is being considered by the Treasury Department as a charge for checking imports against a registered patent and for furnishing the names and addresses of importers bringing in merchandise which appears to infringe such

Under the tariff act of 1930, a registered owner of a patent who suspects that merchandise infringing on his patent is being imported may file a complaint charging unfair methods of competition. To assist in obtaining data upon which to base such a complaint the Bureau of Customs, upon request of the owner of a patent, has furnished the names and addresses of importers of merchandise believed to infringe his patent.

The department stated that considerable work and expense to the government is involved in compiling such information and is a type of service intended by congress to be self-sustaining to the fullest extent possible. Therefore, it proposes to impose a fee of \$100 for checking importations over a period of sixty days.

## S. B. Penick & Co. Forms French Firm

S. B. Penick & Co., New York, has formed S. B. Penick & Co. (S.A.R.L.), with headquarters in Chatou, France. The managing director is Henri Beaudichon, Penick's representative in France since 1946. Penick has facilities in London through association with C. F. Gerhardt, Ltd.

## Revion to Introduce New Cosmetics

Three cosmetic products are in the process of being introduced nationally by Revlon, Inc. Sun Bath tanning lotion, a product said to have anti-peel qualities, will be launched in a plastic container at \$1.25.

The others are Sea Isle colognes in \$3 decanters, and Children's Satin Set, a hair spray.

## Max Factor Plans Expansion Program

An extensive expansion and modernization program, costing more than \$1,000,000 has been announced by Max Factor Jr., president, Max Factor & Co. The newly announced program is a continuation of the \$1,500,000.00 building

project completed during the past year. The extensive two-year improvement program is being financed entirely from retained earnings.

Recently announced plans include the expansion and modernization of six of the company's plants and warehouses in Hollywood and the construction of a building in Toronto for the offices and expanding factory operations of the company's Canadian branch.

## Variety Stores Schedule Exhibits

The full show circuit of the fall series of the 5¢ to \$5.00 Merchandise Show, sponsored and conducted by the National Assn. of Variety Stores, has been announced as follows:

Minneapolis, Leamington Hotel, July 8-10; Dallas, Baker Hotel, July 15-17; Atlanta, Municipal Auditorium, July 22-24; Chicago, La Salle Hotel, July 29-August 1; Cincinnati, Netherland Plaza Hotel, August 5-7; and Miami, Municipal Auditorium, August 19-21.

A carnival theme will be the basis of the decorations in all the shows. All merchandise will be displayed in open booths. Admission is restricted to retailers and wholesalers.

## Heyden Chemical Corp. Reports Sales Increase

In its annual report to stockholders the Heyden Chemical Corp. revealed that net sales in 1955 rose 42 per cent from \$17,-364,000 in 1954 to \$24,657,000. Profits rose to \$1.01 per common share in 1955 on the 1,077,026 shares outstanding, compared with thirty-five cents per common share in 1954 on the 1,085,526 shares then outstanding (after adjustment of 1954 per share earnings for changes in accounting practices made in 1955). Dividends of fifty cents per common share were paid in both 1955 and 1954. In January, 1956, an increase in the quarterly dividend on the common stock to twenty cents per share was announced. At the end of 1955 cash and equivalent totalled in excess of \$13,000,000.

## Symposium on Corrosion To be Held in Paris

The first congress of the European Federation of Corrosion, will be held November 22-December 3 on the occasion of the Convention of Chemical Engineering and IVe Salon de la Chimie, in Paris.

## Helene Curtis Sponsors TV Panel Quiz Show

The new sponsor for the popular Sunday evening television show, "What's My Line?", is Helene Curtis Industries, Inc. Featured on the program are John Charles Daly, moderator; and a panel consisting of Arlene Francis, Bennet Cerf and Dorothy Kilgallen. The panel tries to guess the occupations of guests by asking yes-and-no questions.

#### TRADE LITERATURE

Essential oils, aromatic chemicals, synthetic flower oils, flower-extraction oils, flower pomade oils, sapofixins, and aromatic specialties and bases are among the products listed in the new catalogue issued by Heine & Co. Prices are noted, and descriptions given of most of the materials. Included is a list of the company's Heikodor products, which are compounds of highest concentration serviceable for creams, cosmetics, and extracts.

The Chemical Digest, now in its 22nd volume of publication, is published three times a year by Foster D. Snell, Inc. Its purpose is to keep readers informed of various interesting chemical matters, including recent research findings of general interest.

A description of its latest seamless aluminum bottles is given in a new catalogue by Aluminiumwerke Göttingen GMBH, whose U. S. representative is Basic Material Supply Co., Inc. Specifications on the various types and sizes are noted, and special technical uses recommended.

A price list of its floral absolutes, fixatives, balsams, gums and sundries, citrus and floral concentrates, essential oils, oleoresins, and other materials is offered by Fritzsche Brothers, Inc. to those who purchase in wholesale quantities. Descriptive notes are included.

What's New in Food & Drug Research is a quarterly bulletin which reports news and information of interest to personnel in the drug, cosmetic and food fields. It is mailed free on letterhead request to Food Research Laboratories, Inc. A recent issue featured items on antibiotics in deodorants, technology of orange juice production, and radiation sterilization.

Uvinuls, trade name for ultraviolet light absorbers, are described in a booklet from Antara Chemicals, division of General Aniline & Film Corp. The absorbers provide means of controlling the harmful effects of radiations within the ultraviolet range. Four Uvinuls are described with differing characteristics of each noted.

#### Bourjois, Inc.

#### Retires Preference Stock

Lewis F. Bonham, president of Bourjois, Inc., has announced the recall of all outstanding shares of preference stock on May 15. The total retirement expenditure of \$522,564 will be paid out of cash reserves accumulated by the company for this purpose. There are 12,442 shares outstanding which will be redeemed at \$42 per share.

The final quarterly dividend of \$.6875 will also be paid on the retirement date.

## Armed Forces Evaluate Container Closures

A report of the Armed Forces on research in packaging and materials handling, released to industry through the Office of Technical Services, U. S. Department of Commerce, reveals that laboratory tests indicate that flange, plug, and flexible spout closures are superior in protecting the contents of five gallon containers. Screw type and snap-on closures were said to be not as effective.

## Philadelphia College Observes 135th Anniversary

The 135th anniversary of the founding of the Philadelphia College of Pharmacy and Science was marked recently by two observances. At a formal convocation of

faculty, trustees and students honorary degrees were conferred on L. E. F. Minnich, prominent pharmacist; and William H. Whitman, president of the Pennsylvania Pharmaceutical Assn.

At the Annual Founders' Day Alumni Reunion dinner the principal speaker was Dr. E. Emerson Leuallen, Dean of the School of Pharmacy of Columbia University.

## H. D. Thornley Co. Moves to New Offices

The H. D. Thornley Co., chemical sales agency has moved to new offices at 116 S. 12th St., Philadelphia 7, Pa. Accounts in the soap and cosmetic industries will be serviced from the new address.

## Chicago SCC Hears Report On Silicones in Cosmetics

The April meeting of the Chicago Chapter of the Society of Cosmetic Chemists was addressed by E. G. Tajkowski of the General Electric Co., Silicone Products Department, on "Progress Report on Silicones in Cosmetics and Pharmaceuticals." He discussed recent applications of silicones in cosmetic and pharmaceutical preparations, and the development of new products. Slides were used to augment the presentation.

## Chemical Credit Assn. Holds Sales Executive Meeting

The National Chemical Credit Assn. of New York City held a sales executives meeting on March 14 at the Sheraton-Astor Hotel. The theme of this special event was "how the credit man can contribute further to promoting sales volume."

The well attended event proved to be of value to both credit and sales executives. Chairman Harold Mix presided.

### Drug Industry Public Relations Program Is Pledged Support

Committments for financial support for the public relations program of the drug industry, sponsored by the American Drug Manufacturers Assn., have been made by a number of associations in the industry. A news service supplying material on health will inaugurate the program.

## Appoint U. S. Distributor For Reckitt's Ultramarines

Appointment of Whittaker, Clark & Daniels, Inc., as sole distributor of Reckitt's "Seagull" Ultramarines in the United States has been announced.

Reckitt is widely known throughout the world as producers of ultra-marine blue for diversified industrial uses. Their entry into the United States market of industrial type blues, under the trademark "Seagull," is a new venture.

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## Caryl Richards, Inc. Has New Permanent Wave

Caryl Richards, Inc. has announced the release of a new permanent wave lotion which it says will not produce a tight wave. Called "Softy," the product is said to give a soft, natural-looking wave which eliminates the tightness associated with freshly waved hair.

## Henry G. Walter Is van Ameringen-Haebler Director

Henry G. Walter, Jr. was elected to the board of directors of van Ameringen-Haebler at a special meeting on February 29. He is a partner in the law firm of Fulton, Walter & Halley, and also a director of the Heyden Chemical Co. and the St. Maurice Chemical Co. Ltd of Canada.

## Hair Proteinizer and Conditioner Material Available

The Protean Chemical Corp. offers a material, Vericrest, which is the base for the production of a pretreatment proteinizer and hair conditioner. Literature on Vericrest, which is a protein derivative and protective colloid, stresses the importance of protective colloids in reducing damage done to hair by alkalies, cold waving solutions, and heat.

The material is reported to stabilize the bleaching agents, thus protecting the hair from unlevel attack. Its protective properties are explained by reactions with many chemicals and reagents prior to their attack on the hair. Formulations which have been given tests are available without charge.

## Chas. Pfizer Issues Annual Report

Sales and net earnings of Chas. Pfizer & Co., Inc., for 1955 were the highest on record, according to the annual report issued by the 107-year-old manufacturer of drugs and chemicals.

Consolidated sales of \$163,794,654

were 13 per cent above the \$145,238,625 reported in 1954 while net earnings rose from \$15,200,871 to \$15,326,967. Earnings for 1955 were equivalent to \$2.94 per share on 4,959,902 shares outstanding compared with \$2.95 on 4,900,871 shares in 1954.

The company reported profits before taxes had increased 16 per cent from \$22,900,871 to \$26,570,967.

Common stock dividends were raised from \$1.35 to \$1.55 per share in 1955 the fifth consecutive annual increase. Dividends paid during the year totaled \$8,384,262, compared with \$7,358,460 in 1954

## Massachusetts Now Eighth State Upholding Fair Trade

By a decision of the Massachusetts Supreme Court just announced, that state is now the eighth since 1952 to uphold the constitutionality of its fair trade laws.

## Brooklyn Polytechnic Announces Summer Laboratory Program

The Polytechnic Institute of Brooklyn has announced the 1956 schedule for its thirteenth annual summer laboratory program for industry. Six high level, concentrated courses in laboratory techniques will be offered for industrial researchers who wish to master the latest methods and equipment.

The one and two week courses, with eight hour daily laboratory sessions in addition to evening lectures, will cover the following fields: x-ray diffraction; infra-red spectroscopy; polarography; progress in polymerization and copolymerization techniques; properties of macromolecules in solution and ion exchange.

## Hazel-Atlas Issues Annual Report 1955

The Hazel-Atlas Glass Co. has issued its annual financial report for the year 1955. Net sales for the year are reported at \$79,919,794.91, and net income at \$3,392,833.25.

## Executives Review Cost-Cutting Methods

The latest developments in cost-cutting methods and their applications to manufacturing operations were reviewed at a special conference on reducing manufacturing costs which was conducted by the American Management Assn. in New York City March 26-28. Representatives from some of the country's leading manufacturers addressed the more than 500 production executives who attended.

## E. A. Bromund Co. Beeswax Refiners Sold to Chemway Corp.

The E. A. Bromund Co., refiners and processors of beeswax, has been sold to the Chemway Corp., New Brunswick, N. J.

The Chemway Corp. was formerly Zonite Products Corp. It owns Lady Esther Co., manufacturers of cosmetics and also makes pharmaceutical and household products. It will use the major part of Bromund's production in its own manufacturing.

## Appoint Advisory Committee For Chemical Exposition

A twelve-man advisory committee has been appointed for the 9th National Chemical Exposition which will be held in Cleveland, Ohio November 27-30. The 1956 show will be sponsored jointly by the Cleveland and Chicago sections of the American Chemical Society.

## Chemical Salesmen Plan Golf Outings

The Salesmen's Assn. of the American Chemical Industry has announced a schedule of five golf outings for the 1956 season: May 17, Huntington Crescent Club, Huntington, L. I., N. Y.; June 19, Bonnie Briar Country Club, Larchmont, N. Y.; July 19, Knickerbocker Country Club, Tenafly, N. J.; August 16, Tamarack Country Club, Greenwich, Conn.; and September 11, Hackensack Country Club, Oradell, N. J.



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## Air Transport Assn. Advises Metal Tubes for Cosmetics

A booklet issued recently by the Air Transport Assn. advises air travelers to carry a special small bag for cosmetics. It emphasizes that a well assembled cosmetics kit is important to personal comfort when traveling, and should be planned in advance to include all necessities. Fold-up metal tubes are recommended because they are light in weight, do not break and spill, and are easily packed.

## Color Publication Offered By Bureau of Standards

"The ISCC-NBS Method of Designating Colors and a Dictionary of Color Names," by Kenneth L. Kelly and Deane B. Judd (National Bureau of Standards Circular 553) is available from the Government Printing Office.

The book is designed to assist the scientist, businessman, designer and layman in understanding the different color vocabularies used in the fields of industry, science and art. For example, explanation is given that Griseo-Viridis (biology) is equivalent to Serpentine (fashion) and mint green (mass market), and is in common parlance, light green. Meanings of 7,500 individual color names are listed.

The terms employed are a refinement of the method of designating colors outlined by the Inter-Society Color Council and developed by the National Bureau of Standards. The system applies not only to the colors of drugs and chemicals, for which it was originally developed, but to the colors of all opaque, clear, cloudy or fluorescent samples, whether viewed by reflected or transmitted light, and to microscopic structures.

## MIT Will Teach Infrared Spectroscopy

The Massachusetts Institute of Technology will offer an intensive course in infrared spectroscopy this summer. The course, designed for those who want an introduction to infrared instrumentation and laboratory methods and for those

interested in the use of infrared spectra in the solution of chemical problems, will consist of two integrated one-week courses.

## Annual DECHEMA Congress To Meet in June

The annual congress of the DE-CHEMA for 1956 will be held in Frankfurt am Main, Germany, June 6-9. The main theme of the meeting will be "The Basic Principles of Chemical Engineering as Applied to Chemical Reactions on a Large Scale." The subject will be treated by a series of about six plenary lectures to be delivered by scientists of international repute.

## Rhodia, Inc. Moves To Larger Quarters

Rhodia, Inc. has moved to improved facilities at 60 East 56th St., New York 22, N. Y. The telephone number is PLaza 3-4850.

## Pacific Coast Borax Reveals Expansion Plans

At a recent sales conference held at Furnace Creek Inn, in historic Death Valley, Calif., the Pacific Coast Borax Co. revealed future expansion plans to its members. Details of the company's new open-pit mining operations and expanded processing plant now under construction at Boron, Calif. were explained. Company officials indicated the new plant and mining facilities will provide a substantial overall increase in capacity designed to take care of the growing demand for borate products in industry and agriculture.

## Michigan Chemists Hear Heisman Talk on Business

The Chemical and Allied Industries Assn. of Michigan held its March meeting in Detroit on March 26.

G. Fred Heisman of the Dow Chemical Co. addressed the group on "How Our Business System Operates."

## Packaging Exposition Provides Extensive Display

The 25th National Packaging Exposition of the American Management Assn. was held at Convention Hall, Atlantic City, N. J. April 9-12. The show, designed to provide men in production, sales, engineering and design an opportunity to compare all aspects of packaging, featured displays of machines, materials, containers and special equipment.

## Obituary

#### Colonel Evan Ewan Kimble

Colonel Evan Ewan Kimble, founder of the Kimble Glass Co., which is now a subsidiary of the Owens-Illinois Glass Co., died on March 15 at his home in Ventnor City. N. J.

Colonel Kimble was born in 1868, and at the age of 12 went to work in a Mill-ville, N. J., glass plant. In 1901, with three employees and \$3,000 in capital, most of which was borrowed, he set up his own shop in Chicago. Later the Kimble Glass Co. was moved East.

He was recognized for his many civic and charitable deeds, and for his active participation in community affairs. Colonel Kimble was an early member of Rotary No. 1 in Chicago, a thirty-third degree Mason, a member of Medinah Temple, Chicago, of Seaview Country Club, Absecon, N. J., and the Surf Club and Indian Creek Golf Club, Miami Beach, Fla. In 1951 he received the Scientific Apparatus Makers Assn. Award for his contribution to the American scientific instrument industry and his work in the chemical glassware field.

Colonel Kimble is survived by his wife; a son, Herman K. Kimble, a director of the Owens-Illinois Glass Co.; a granddaughter, Mrs. Dale Kimble Ausbrook; and a grandson, Evan Ewan Kimble II.

### Jaroslav H. Jicha

Jaroslav H. Jicha, chemical engineer with the Staten Island, N. Y. plant of Procter & Gamble Co., died on March 13 in West New Brighton, N. Y.

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Leon Givaudan, co-director of Companhia Brasileira Givaudan, and son of Andre Givaudan of L. Givaudan & Cie., S.A., Geneva, on his return to Brazil from Europe spent several days in New York. During his brief visit Mr. Givaudan contacted New York firms directly interested in Brazilian activities of the industry.

Harry J. Flinn was recently honored by officials of the Armstrong Cork Co. when he completed his 50th year of service

North Carolina. Mr. Schneider was well known in the trade, particularly for his knowledge of Henna and natural flavoring extracts.

Frank N. Pond has been appointed sales manager of Dominion Products, Inc. A graduate of Columbia University in pharmaceutical chemistry, Mr. Pond has spent 23 years in sales and administration in the drug, cosmetic and flavor industries. He will handle promotion of the company's domestic sales, including

Coast, Rocky Mountain states, Texas and Oklahoma, and will work from his newly-established Los Angeles headquarters. Having supervised major western accounts for many years, seventeen a vice president of Lucien Lelong, Inc., and the last three as Southern California manager for General Beauty Products.

Louis E. Genoud, managing director of Comptoir de la Parfumerie in Geneva, Switzerland, sole distributors in that



Harry J. Flinn

with the company. Mr. Flinn has specialized in packaging sales in the cosmetics field in the New York area since 1932. He is well known among the founders of many New York cosmetics companies because of his early work in pioneering modern packaging.

Jacques P. Sibeud has been appointed manager of laboratories for Rhodia, Inc., New York. A native of Toulon, France, Dr. Sibeud attended the University of Lyon and was graduated with a degree of Ingenieur E.S.C.I.L. He received a Ph.D. in chemistry from the same university in 1952.

Madame Helena Rubinstein is serving as volunteer chairman of the drug and chemical group in the current Red Cross campaign for members and funds. She is assisted by Roy V. Titus, executive vice president, Helena Rubinstein, Inc., who is deputy chairman of the cosmetics committee.

Joseph Baird Magnus, vice president, Magnus, Mabee & Reynard, Inc., has been elected to serve on the Board of Managers of the North-Eastern Dispensary in the City of New York.

Edwin L. Schneider, assistant secretary of S. B. Penick & Co., retired on March 17, the fortieth anniversary of his employment with the company. He was the first employee of the company in New York when it was moved here from



Frank N. Pond

its newer specialties in the flavor and cosmetic fields.

Grover A. Whalen, chairman of the board of Coty, Inc., has accepted the post of chairman of the advisory committee to the Fashion Industries Exposition, Fashion-O-Rama, which will be held in the New York Coliseum October 27-November 4. It is the first world exposition devoted exclusively to the fashion industry.

Arthur E. Toft has been named advertising brand manager of the Block Drug Co.

Otto I. Weinold has been appointed midwest sales manager, with headquarters in Minneapolis, for the Orlane line of imported French beauty preparations and Jean d'Albret's Ecusson and Cassaque Parfums. He has worked as representative for Barbara Gould and Bourjois, and has had his own cosmetic sales agency.

Jack I. Poses of D'Orsay Sales Co. has accepted an honorary chairmanship of the 1956 campaign of the Drugs and Cosmetics Division of the Joint Defense Appeal of the American Jewish Committee and the Anti-Defamation League of B'nai B'rith.

L. G. Heiner is Western Sales Manager for Orlane and Jean d'Albert. He will be in charge of the entire Pacific



Louis E. Genoud

country for Roux Distributing Co., American Safety Razor Co., Natone Co., Lanvin Perfumes and Caron Perfumes, is making his first trip to the United States to contact American firms and to study cosmetics and perfumes on the American market. During his five week stay he will visit New York, Chicago, Washington, San Francisco and Los Angeles.

Louis Dejoie, a pioneer in the development of a new process for distilling Haitian lime oil, has returned to Portau-Prince, Haiti, after spending several weeks in the United States. Much of his time was spent with Raymond Lermond of the John D. Walsh Co., United States representative for Establissements Agricoles et Industrielle, Inc., producers of Haitian essential oils, of which Mr. Dejoie is president.

William Mennen Jr., Mennen Co., is chairman of the entertainment committee of the NWDA and is planning an unusually interesting program for the 86th meeting in Hollywood Beach, Florida.

Fred P. Lauth has been appointed executive personnel director for Helene Curtis Industries, Inc.

Harry K. Kimbriel, executive secretary of the National Wholesale Druggists Assn. is now located in the association's new and enlarged quarters at 60 E. 42nd St., New York 17, N. Y.

## MARKET REPORT



## Trade in Essential Oils and Aromatic Chemicals Is Brisk . . .

TRADE in essential oils, aromatic chemicals and closely related products was quite brisk over the past month. A leveling off in industrial operations, particularly in some basic lines, was offset by stepped up operations by manufacturers working on a general line of consumer items for the Easter holiday trade, and a

rather extended list of processed items for spring use. A flurry of activity was noted in oils that come from Europe as the result of severe weather conditions which hit many of the crops. Prices on several of the high priced floral oils threaten to go higher once the extent of the damage is fully determined.

## PRICE CHANGES

Advances	Current	<b>Previous</b>
Copra, coast, ton	\$152.00	\$147.50
Citral	\$4.75	\$4.50
Balsam Tolu	\$4.00	\$3.85
Gum arabic, amber sorts	0.181/2	0.18
Alcohol, drums, gal.—		
Proprietary, carlots	0.61	0.58
Less carlots	0.66	0.63
Oil lemongrass, native	\$2.20	\$1.90
Cocoa butter, ton lots	0.50	0.48
Vanilla beans, Bourbons	\$5.85	\$4.85
Oil almond, sweet	\$1.10	0.85
Oil guaiac wood	\$1.75	\$1.50
Oil lemon, Italian	\$5.30	\$5.00
Declines		
Vanillin, lignin-		
25 lb. cans	\$2.80	\$3.00
100 lb. cans	\$2.75	\$3.00
Ethyl vanillin—		
25 lb. cans	\$6.25	\$6.75
100 lb. drums	\$6.20	\$6.75
Oil grapefruit	\$1.75	\$1.85
Oil pimento leaf	\$2.65	\$2.75
Prices per pound unless otherwise specified.		

#### BERGAMOT CROP HIT-

A decidedly firmer tone developed in oil bergamot over the past month as the result of the winter damage to the crop. Some private advices reaching here indicated that this year production is likely to prove only about 60 per cent of that of last year. While the reduced output is likely to firm prices, every effort will be made to keep the market at a reasonable level to discourage the use of substitute items.

#### KETONES, ALCOHOLS UP-

Because of a jump in freight rates, increased handling costs, and higher container costs, drum prices on an extended line of ketones and ester alcohols were boosted ½ cent per pound. All grades of industrial alcohol sold in drums were boosted 3 cents a gallon. The new prices became effective April 1. Differentials on articles selling on a pound basis were raised to 2½/e a pound for carlot quantities while less than carlot quantities in

drums which had previously been quoted 3 cents over the tankcar prices were boosted by  $3\frac{1}{2}$  cents a pound.

#### ETHYL VANILLIN DECLINES-

Lignin and ethyl vanillin prices dropped 20 to 50 cents per pound as the result of competitive conditions. The reductions represented the first changes in these items in about two years. Both articles have been gradually cutting into the natural vanilla extract field. However, a more extensive research program in the vanilla bean industry, as well as low prices, served to create real concern in the vanillin trade.

## GLYCERINE OUTLOOK CLOUDED-

The outlook in glycerine has turned clouded. With increasing quantities of synthetic material coming into the market less interest has been shown in Argentine crude and the supply position in domestic crude material has become somewhat easier as reflected by the late

reduction of a cent a pound in domestic soap lye and saponification. A lot of several hundred tons of Argentine crude glycerine for shipment over a period of several months was reported to have been sold to Europe. The demand for refined glycerine continued active and in good volume but a changing supply position or greater availability of synthetic material with a correspondingly reduced call for domestic crude could have a softening effect upon prices for refined material, it is pointed out.

#### SAFROL OILS UNSETTLED-

Despite the persistent drop in prices of safrol bearing oils over a period of many months, the market for ocotea cymbarum continued to be depressed and there was little incentive for buyers here to purchase very large quantities.

#### GAINS LOOM IN CITRUS GROUP-

Firm conditions prevail in oil lemon. Spot prices on distilled lime slipped off slightly over the past month. As in the case of lemon and orange, however, more lime oil is expected to be needed over the coming quarter, and it is generally believed shipping prices out of Mexico will continue to be maintained at previous levels. Prices on California lemon and orange oils have remained steady over a rather extended period, especially on the Exchange brands. Orange and lemon oils from Italy are likely to cost more because of severe winter damage to the trees.

## LEMONGRASS OIL FIRMER—

Following a decline of about 10 cents a pound early last month, spot and future positions moved upward toward the close. Dealers here moved prices upward by 15¢ to 25¢ per pound to the level of \$2.20 to \$2.30. Although last year's crop in India was larger than in 1954, demand was correspondingly greater, leaving only what might be regarded as a normal carryover. New crop oil should reach exporters hands in India by June, but it is not yet clear whether there will be sufficient quantities to meet total bookings for that month.

#### TREND MIXED IN VANILLA BEANS-

While prices on Bourbon vanilla beans moved up a full \$1 per pound from the low point reached a month ago, holders of Mexican beans were faced with the problem of quoting prices that were competitive with the Bourbon beans.





1905

1956

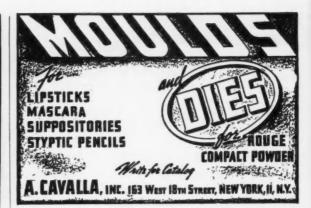
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